FILES SEARCHED:

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  File 123:CLAIMS(R)/Current Legal Status  1980-2001/Jun 19
        (c) 2001 IFI/CLAIMS
*File 123: Price changes as of 1/1/01. Please see HELP RATES 123.
*** Reassignment data is current through Feb. 2, 2001 recordings.
  File 340:CLAIMS(R)/US PATENT  1950-01/Jun 19
        (c) 2001 IFI/CLAIMS(R)
*File 340: Price changes as 0f 1/1/01. Please see HELP RATES 340.
  File 342:Derwent Patents Citation Indx  1978-01/200129
        (c) 2001 Derwent Info Ltd
*File 342: Price changes as of 1/1/01.  Please see HELP RATES 342.
  File 344:CHINESE PATENTS ABS  APR 1985-2001/May
        (c) 2001 EUROPEAN PATENT OFFICE
  File 345:Inpadoc/Fam.& Legal Stat  1968-2001/UD=200124
        (c) 2001 EPO
*File 345: IDPAT is temporarily not working.
  File 347:JAPIO  OCT 1976-2001/Feb(UPDATED 010604)
        (c) 2001 JPO & JAPIO
*File 347: JAPIO data problems with year 2000 records are now fixed.
Alerts have been run.  See HELP NEWS 347 for details.
  File 348:EUROPEAN PATENTS  1978-2001/Jun W03
        (c) 2001 European Patent Office
  File 349:PCT Fulltext  1983-2001/UB=20010614, UT=20010531
        (c) 2001 WIPO/MicroPat
  File 351:Derwent WPI  1963-2001/UD,UM &UP=200135
        (c) 2001 Derwent Info Ltd
*File 351: Price changes as of 1/1/01. Please see HELP RATES 351.
 72 Updates in 2001. Please see HELP NEWS 351 for details.
  File 371:French Patents  1961-2001/BOPI 200124
        (c) 2001 INPI.  All rts. reserv.
  File 447:IMSWorld Patents International  2001/Jun
        (c) 2001 IMSWorld Publ. Ltd.
  File 652:US Patents Fulltext  1971-1979
        (c) format only 2001 The Dialog Corp.
*File 652: Reassignment data current through 12/5/2000 recordings.
Due to processing problems, the SORT command is not working.
  File 653:US Pat.Fulltext  1980-1989
        (c) format only 2001 The Dialog Corp.
*File 653: Reassignment data current through 12/5/2000 recordings.
Due to processing problems, the SORT command is not working.
  File 654:US PAT.FULL.  1990-2001/Jun 19
        (c) format only 2001 The Dialog Corp.
*File 654: Reassignment data current through 12/5/2000 recordings.

  Selected file: USAPPS
  US Patent Applications full text from the USPTO
  Coverage : March 15, 2001 to present (2001-25/UP)
  Phase 1 database release date : 2001/03/29 (YYYY/MM/DD)
  For further information on this file, enter : INFO USAPPS
  Last database update : 2001/06/21 (YYYY/MM/DD)
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ABSTRACTS/KWIC OF US AND FOREIGN PATENTS/PUBLICATIONS CONTAINING THE KEYWORDS "(PULS? OR OSCILL?)(5N)FLOW?(5N)OIL? ? AND THERMISTOR?"

4/3,AB,KWIC/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00689424
Apparatus for detecting overheating and for controlling the ignition timing of an engine
Ubertemperaturdetektorgerat und Zundzeitsteuerung fur einen Motor
Appareil pour detecter une surchauffe et pour regler l'instant d'allumage d'un moteur
PATENT ASSIGNEE:
SUZUKI MOTOR CORPORATION, (1334792), 300 Takatsuka-cho, Hamamatsu-shi, Shizuoka-ken, (JP), (applicant designated states: FR;GB;SE)
INVENTOR:
Umehara, Kazuhiro, 2-41-33, Hirosawa, Hamamatsu-shi, Shizuoka-ken, (JP)
LEGAL REPRESENTATIVE:
Chameroy, Claude et al (14591), c/o Cabinet Malemont 42, avenue du President Wilson, 75116 Paris, (FR)
PATENT (CC, No, Kind, Date): EP 657645 A2 950614 (Basic)
EP 657645 A3 951025
EP 657645 B1 980318
APPLICATION (CC, No, Date): EP 95200721 910624;
PRIORITY (CC, No, Date): JP 90172316 900629; JP 90172317 900629
DESIGNATED STATES: FR; GB; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 463953 (EP 914016993)
INTERNATIONAL PATENT CLASS: F02P-005/15; F02P-011/02; F02P-011/06; G01M-015/00;

ABSTRACT EP 657645 A2
A method and apparatus for detecting engine overheating and controlling engine ignition timing utilizes a single temperature sensor. The temperature sensor is positioned adjacent a cylinder head of an engine. A rate of engine temperature increase is calculated based on engine temperature information produced by the temperature sensor, and engine speed is regulated based on the calculated rate of engine temperature increase. Ignition timing is also controlled in response to the engine temperature information produced by the temperature sensor, and the engine speed is regulated to a predetermined speed value whenever the engine temperature exceeds a predetermined temperature value. (see image in original document)
ABSTRACT WORD COUNT: 106

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9812	238
CLAIMS B	(German)	9812	375
CLAIMS B	(French)	9812	271
SPEC B	(English)	9812	7829
Total word count - document A			0
Total word count - document B			8713
Total word count - documents A + B			8713

...SPECIFICATION in Fig. 1 are attached;
Fig. 4 is a diagram showing the characteristics of a thermistor which is used as a temperature sensor in Fig. 1;
Fig. 5 is a diagram...temperature sensor of Fig. 1;

Fig. 9 is a diagram showing the characteristic of a thermistor used in a temperature sensor of Fig. 1;
Fig. 10 is an explanatory diagram showing...

...12, an engine temperature signal from an engine temperature sensor SE1, and signals of an oil level sensor SE2, an oil flow sensor SE3, etc. This control unit comprises pulser coils 2 to 5 connected to a noise filter 50, a trigger output buffer 53...

...temperature sensor SE1 attached to the cylinder head or in the neighborhood thereof uses a thermistor having a characteristic that a resistance value thereof is decreased as temperature becomes higher as... less (see Fig. 4), the microcomputer circuit 52 determines that the resistance value of the thermistor is Ro)) or more, and the spark advancing time of the starting time may be...

...degree)C) or more, the microcomputer circuit 52 determines that the resistance value of the thermistor is R1)) or less, and the spark advancing time of the starting time may be...

...less at the starting time of the engine, the resistance value of the temperature sensor (thermistor) SE1 is already at least Ro)) ohms (see Fig. 4). Referring to the flowchart of...

...sensor SE1 functioning as a sensor for detecting the engine overheat also uses the sensor (thermistor) which is used for switching the spark advancing time of the engine starting time previously...rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a ...spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in Fig. 9. Normal and abnormal rising characteristics of engine...

...12, when the engine temperature T reaches t5)) at 303 (the resistance value of the thermistor in Fig. 9 is R5)) ((OMEGA)) at this time), the microcomputer circuit 52 judges that...

...is greater than or equal to overheat warning canceling temperature t'5)) ((degree)C) (the thermistor resistance value from Fig. 9 is R'5)) ((OMEGA)) at this time). If T is...rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a condition for starting spark advancement...

...spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in Fig. 9. Normal and abnormal rising characteristics of engine...

...12, when the engine temperature T reaches t5)) at 303 (the resistance value of the thermistor in Fig. 9 is R5)) ((OMEGA)) at this time), the microcomputer circuit 52 judges that...
...is greater than or equal to overheat warning canceling temperature t'5)) ((degree)C) (the thermistor resistance value from Fig. 9 is R'5)) ((OMEGA)) at this time). If T is...

4/3,AB,KWIC/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00492928

Overheat detecting apparatus for engine

Ubertemperaturdetektorgerat fur Motor

Appareil detecteur de surchauffe pour moteur

PATENT ASSIGNEE:
SUZUKI MOTOR CORPORATION, (1334792), 300 Takatsuka-cho, Hamamatsu-shi, Shizuoka-ken, (JP), (applicant designated states: FR;GB;SE)
INVENTOR:
Umehara, Kazuhiro, 2-41-33, Hirosawa, Hamamatsu-shi, Shizuoka-ken, (JP)
LEGAL REPRESENTATIVE:
Chauchard, Robert et al (14651), c/o Cabinet Malemont 42, avenue du President Wilson, F-75116 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 463953 A2 920102 (Basic)
EP 463953 A3 931110
EP 463953 B1 960327
APPLICATION (CC, No, Date): EP 91401699 910624;
PRIORITY (CC, No, Date): JP 90172316 900629; JP 90172317 900629
DESIGNATED STATES: FR; GB; SE
INTERNATIONAL PATENT CLASS: G01M-015/00; F02P-011/02; F02P-011/06;

ABSTRACT EP 463953 A2

A method and apparatus for detecting engine overheating and controlling engine ignition timing utilizes a single temperature sensor. The temperature sensor is positioned adjacent a cylinder head of an engine. A rate of engine temperature increase is calculated based on engine temperature information produced by the temperature sensor, and engine speed is regulated based on the calculated rate of engine temperature increase. Ignition timing is also controlled in response to the engine temperature information produced by the temperature sensor, and the engine speed is regulated to a predetermined speed value whenever the engine temperature exceeds a predetermined temperature value. (see image in original document)

ABSTRACT WORD COUNT: 106

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	400
CLAIMS B	(English)	EPAB96	642
CLAIMS B	(German)	EPAB96	527
CLAIMS B	(French)	EPAB96	790
SPEC A	(English)	EPABF1	5860
SPEC B	(English)	EPAB96	5244
Total word count - document A			6260
Total word count - document B			7203
Total word count - documents A + B			13463

...SPECIFICATION in Fig. 1 are attached;

Fig. 4 is a diagram showing the characteristics of a thermistor which is used as a temperature sensor in Fig. 1;

Fig. 5 is a diagram...

...temperature sensor of Fig. 1;

Fig. 9 is a diagram showing the characteristic of a thermistor used in a temperature sensor of Fig. 1;

Fig. 10 is an explanatory diagram showing...

...12, an engine temperature signal from an engine temperature sensor SE1, and signals of an oil level sensor SE2, an oil flow sensor SE3, etc. This control unit comprises pulser coils 2 to 5 connected to a

noise filter 50, a trigger output buffer 53...temperature sensor SE1 attached to the cylinder head or in the neighborhood thereof uses a thermistor having a characteristic that a resistance value thereof is decreased as temperature becomes higher as...

...less (see Fig. 4), the microcomputer circuit 52 determines that the resistance value of the thermistor is R(sub 0) or more, and the spark advancing time of the starting time...

...degree)C) or more, the microcomputer circuit 52 determines that the resistance value of the thermistor is R(sub 1) or less, and the spark advancing time of the starting time...

...less at the starting time of the engine, the resistance value of the temperature sensor (thermistor) SE1 is already at least R(sub 0) ohms (see Fig. 4). Referring to the...sensor SE1 functioning as a sensor for detecting the engine overheat also uses the sensor (thermistor) which is used for switching the spark advancing time of the engine starting time previously...rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a condition for starting spark advancement...

...spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in Fig. 9. Normal and abnormal rising characteristics of engine...

...the engine temperature T reaches t(sub 5) at 303 (the resistance value of the thermistor in Fig. 9 is R(sub 5) ((OMEGA)) at this time), the microcomputer circuit 52...

...than or equal to overheat warning canceling temperature t(min)(sub 5) ((degree)C) (the thermistor resistance value from Fig. 9 is R(min)(sub 5) ((OMEGA)) at this time). If...

...SPECIFICATION in Fig. 1 are attached;

Fig. 4 is a diagram showing the characteristics of a thermistor which is used as a temperature sensor in Fig. 1;

Fig. 5 is a diagram...

...temperature sensor of Fig. 1;

Fig. 9 is a diagram showing the characteristic of a thermistor used in a temperature sensor of Fig. 1;

Fig. 10 is an explanatory diagram showing...12, an engine temperature signal from an engine temperature sensor SE1, and signals of an oil level sensor SE2, an oil flow sensor SE3, etc. This control unit comprises pulser coils 2 to 5 connected to a noise filter 50, a trigger output buffer 53...

...temperature sensor SE1 attached to the cylinder head or in the neighborhood thereof uses a thermistor having a characteristic that a resistance value thereof is decreased as temperature becomes higher as...

...less (see Fig. 4), the microcomputer circuit 52 determines that the resistance value of the thermistor is R(sub 0) or more, and the spark advancing time of the starting time...

...degree)C) or more, the microcomputer circuit 52 determines that the resistance value of the thermistor is R(sub 1) or less, and the spark advancing time of the starting time...less at the starting time of the engine, the resistance value of the temperature sensor (thermistor) SE1 is already at least R(sub 0) ohms (see Fig. 4). Referring to the...

...sensor SE1 functioning as a sensor for detecting the engine overheat also uses the sensor (thermistor) which is used for switching the spark advancing time of the engine starting time previously...rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a condition for starting spark advancement...spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in Fig. 9. Normal and abnormal rising characteristics of engine...

...the engine temperature T reaches t(sub 5) at 303 (the resistance value of the thermistor in Fig. 9 is R(sub 5) ((OMEGA)) at this time), the microcomputer circuit 52...

...than or equal to overheat warning canceling temperature t(minutes)(sub 5) ((degree)C) (the thermistor resistance value from Fig. 9 is R(minutes)(sub 5) ((OMEGA)) at this time). If...

4/3,AB,KWIC/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00470377
Method and apparatus for measuring the density of a liquid
Verfahren und Vorrichtung zum Messen der Dichte einer Flussigkeit
Procede et dispositif de mesure de la densite d'un liquide
PATENT ASSIGNEE:
AlliedSignal Inc., (943561), 101 Columbia Road, P.O. Box 2245, Morristown, New Jersey 07962-2245, (US), (applicant designated states: DE;FR;GB;IT;SE)
INVENTOR:
Cassaday, Ernest W., c/o Allied-Signal Inc., 111 S. 34th Street, P.O. Box 5217, Phoenix, Arizona 85010, (US)
Roundy, James S., c/o Allied-Signal Inc., 111 S. 34th Street, P.O. Box 5217, Phoenix, Arizona 85010, (US)
LEGAL REPRESENTATIVE:
Poidatz, Emmanuel (17925), Conseil en Brevets d'Invention 96, Boulevard Malesherbes, 75017 Paris, (FR)
PATENT (CC, No, Kind, Date): EP 481264 A1 920422 (Basic)
EP 481264 B1 961120
APPLICATION (CC, No, Date): EP 91116418 910926;
PRIORITY (CC, No, Date): US 597945 901015
DESIGNATED STATES: DE; FR; GB; IT; SE
INTERNATIONAL PATENT CLASS: G01N-009/32; F15C-001/00;

ABSTRACT EP 481264 A1
A process for monitoring fluid density by use of a fluidic jet oscillator (26) absent the necessity for a high-precision pressure regulator. Fluid is delivered to the fluidic oscillator (26) via a pressure divider (28). As the fluid flows through the oscillator the latter generates a pressure wavetrain at a frequency which is indicative of the density of the fluid, but is inaccurate to the extent that the pressure difference across the oscillator varies from a predetermined value. A differential pressure transducer (30) senses the pressure difference. Accordingly, the process is adapted for use with a gated sampling and control system (84) which operatively responds to the oscillator output only when the differential pressure is substantially in accord with a predetermined value thereof. (see image in original

document)
ABSTRACT WORD COUNT: 130

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	280
CLAIMS B	(English)	EPAB96	302
CLAIMS B	(German)	EPAB96	305
CLAIMS B	(French)	EPAB96	359
SPEC A	(English)	EPABF1	2134
SPEC B	(English)	EPAB96	2131
Total word count - document A			2414
Total word count - document B			3097
Total word count - documents A + B			5511

...SPECIFICATION a single piezoelectric transducer 32 rather than to separate transducers, and that it incorporates a thermistor 34 to monitor the temperature of the oil. Accordingly, the oscillator 26 in operation generates...

...a wire 36 to an external electronic processor 38. The differential pressure transducer 30 and thermistor 34 are elements of external circuit branches (indicated by lines 40, 42) connected to the...pressure divider 28 by the provision of a first-bore 78, and to receive the thermistor 34 and differential pressure transducer 30 by the provision of a second bore 80. The differential pressure transducer 30, thermistor 34, and pressure divider 28 are inserted in the indicated bores 78, 80 and rigidly...

...70 are adapted to provide for electrical communication from the differential pressure transducer 30 and thermistor 34 to a cylindrical boss 82 which is rigidly secured to the mounting plate 70...

...center port 60, along the supply passage 64, and to the supply port of the oscillator 26. As the oil flows through the oscillator 26 to the vent passage 24, the oscillator generates a fluidic wavetrain having a frequency which depends on the density of the oil...

...accumulator register 94 receives the differential frequency count, and receives the temperature signal from the thermistor 34. The latter signal is employed in the accumulator register 94 to bias the least...

...SPECIFICATION a single piezoelectric transducer 32 rather than to separate transducers, and that it incorporates a thermistor 34 to monitor the temperature of the oil. Accordingly, the oscillator 26 in operation generates...

...a wire 36 to an external electronic processor 38. The differential pressure transducer 30 and thermistor 34 are elements of external circuit branches (indicated by lines 40, 42) connected to the...pressure divider 28 by the provision of a first-bore 78, and to receive the thermistor 34 and differential pressure transducer 30 by the provision of a second bore 80. The differential pressure transducer 30, thermistor 34, and pressure divider 28 are inserted in the indicated bores 78, 80 and rigidly...

...70 are adapted to provide for electrical communication from the differential pressure transducer 30 and thermistor 34 to a cylindrical boss 82 which is rigidly secured to the mounting plate 70...

...center port 60, along the supply passage 64, and to the supply port of the oscillator 26. As the oil flows through the oscillator 26 to

the vent passage 2[illegible] the oscillator generates a fluidic wavetrain having a frequency which depends on the density of the oil...

...accumulator register 94 receives the differential frequency count, and receives the temperature signal from the thermistor 34. The latter signal is employed in the accumulator register 94 to bias the least...

4/3,AB,KWIC/4 (Item 4 from file: 349)
DIALOG(R)File 349:PCT Fulltext

00795227
COOKING APPARATUS
APPAREIL DE CUISSON
Patent Applicant/Assignee:
VOS INDUSTRIES LIMITED, 5 Carson Road, Malaga, W.A. 6090, AU, AU (Residence), AU (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
BARKER Roy, 135 Brewer Road, Maida Vale, W.A. 6057, AU, AU (Residence), AU (Nationality), (Designated only for: US)
KENT Roger, 5 Ludwig Place, Duncraig, W.A. 6023, AU, AU (Residence), AU (Nationality), (Designated only for: US)
SMITH Leon, 23 Strathalbyn Loop, Carramar, W.A. 6031, US, US (Residence), US (Nationality), (Designated only for: US)
HEADBERRY David, 73 Longview Road, North Balwyn, VIC 3104, AU, AU (Residence), AU (Nationality), (Designated only for: US)
MAGILL Norman, 15 Exmouth Vista, Gwelup, W.A. 6018, AU, AU (Residence), AU (Nationality), (Designated only for: US)
WALTERS Adrianne, 5 Meakers Way, Girrawheen, W.A. 6064, AU, AU (Residence), AU (Nationality), (Designated only for: US)
SKELLHAM Adam, 43 Centre Circle, Ellenbrook, W.A. 6069, AU, AU (Residence), AU (Nationality), (Designated only for: US)
KENDREW Mark, 105 Rookwood Street, Mt. Lawley, W.A. 6050, AU, AU (Residence), AU (Nationality), (Designated only for: US)
DUTA Gheorghe, 162 Bridgewater Drive, Kallaroo, W.A. 6025, AU, AU (Residence), AU (Nationality), (Designated only for: US)
Legal Representative:
WATERMARK PATENT & TRADEMARK ATTORNEYS (agent), 4th Floor, "Durack Centre", 263 Adelaide Terrace, Perth, W.A. 6000, AU,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200128392 A1 20010426 (WO 0128392)
Application: WO 2000AU1260 20001018 (PCT/WO AU0001260)
Priority Application: AU 993498 19991018; AU 20007063 20000420; AU 20008761 20000714
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 15351

English Abstract
Disclosed is a vat type cooking apparatus (10) as well as methods of operation thereof. The cooking apparatus (10) may be a fryer having a vat (35) for containing cooking medium. A conveying means (33; 50) is used to convey food items through the vat (35). The conveying means (33; 50)

includes a partition member (33) immersible within the vat (35) during use. Partition member (33) is moved through vat (35) in controlled displacements during the cooking of food items, particularly to create turbulence within vat (35) and a better quality of product food items following cooking. The fryer (10) may incorporate a conveying system (810) for feeding food items to vat (35). The housing (212) may be fabricated from a material non-contaminative of food items. An inner surface of housing (212) may include a flow promoting means (815) desirably in the form of a helical threadform. The housing (212) is rotatable about its longitudinal axis for discharging food items to fryer (10) at the discharge end (820) of the housing (212).

French Abstract

L'invention concerne un appareil de cuisson du type cuve (10) et des procedes relatifs au fonctionnement de cet appareil (10), qui peut etre une bassine a frire comprenant une cuve (35) dans laquelle on place un milieu de friture. Un systeme d'approvisionnement (33; 50) assure l'approvisionnement des aliments dans la cuve (35). Ce systeme (33; 50) comprend une partition (33) susceptible d'etre immergee dans la cuve (35) a l'utilisation. La partition (33) est deplacee dans la cuve (35) suivant des mouvements controles, au cours de la cuisson des aliments, en particulier pour creer des turbulences dans la cuve (35) et pour ameliorer la qualite du produit au cours de la cuisson. La bassine a frire (10) peut comprendre un systeme d'approvisionnement (810) assurant l'approvisionnement des aliments dans la cuve (35). L'enceinte (212) peut etre en materiau non contaminant pour les aliments. Une surface interne de l'enceinte (212) peut comporter un systeme facilitant l'ecoulement du flux (815) de preference sous la forme d'un filet helicoidal. L'enceinte (212) peut tourner autour de son axe longitudinal pour decharger les aliments dans la bassine a frire (10) a l'extremite de dechargement (820) prevue sur cette enceinte (212).

Fulltext Availability:
Detailed Description

Detailed Description

... state, which the operator or ECU may appropriately address. A further temperature probe, typically a thermistor , may be located adjacent normal operating oil level ("NOOL") of the cooking chamber allowing sensed...

...whether oil level needs top up. As oil level measurement is critical, two or more thermistors may be employed adjacent NOOL or at acceptable limits of the level range. The thermistors may be connected to separate input channels to the ECU and may ideally be locateda temperature ramp acceptable to the ECU. If error between the two thermistors exceeds a predetermined value, say about 150C, an alarm may be triggered and the cooking apparatus shut down. Thermistor signals may also be cross-checked with signals from the first temperature probe for level...

...each other, for example through the cold zone, the first temperature probe and "level sensing" thermistors may be omitted from one of the sub-chambers.

Provision for filtration of oil or...134, extend a considerable distance between top and bottom of partition member 33 to enable flow of oil through them to promote, during pulsing motion of partition member 33 in cooking zones 130a and 130b, mixing of oil within...or thermocouple failure. ECU 100 may enable the appropriate control response.
Two temperature probes or thermistors T2 and T3 may be provided in wall 303 at about the normal oil operating...

...30a and 30b to assist in level control. The value of temperature sensed by the thermistors T2 and T3 is used to ensure that oil level is retained within safe operating...up routine may be implemented as described below.

Also, if comparison of temperature reading at thermistors T2 and T3 varies in a predicted way, as programmed in ECU 100, from temperature...

...this may indicate a low oil level condition. Similarly, if the temperature ramp at these thermistors T2 and T3 is less than the predicted value stored in ECU 100, this may...

4/3,AB,KWIC/5 (Item 5 from file: 349)
DIALOG(R)File 349:PCT Fulltext

00210712
WATER/OIL RATIO MEASURING APPARATUS
APPAREIL DE MESURE DU RAPPORT EAU/HUILE
Patent Applicant/Assignee:
HYDRIL COMPANY
Inventor(s):
HUMBERT Hugh L
WOODS Allan O
SISKA Margaret M
Patent and Priority Information (Country, Number, Date):
Patent: WO 8501352 A1 19850328
Application: WO 84US1392 19840904 (PCT/WO US8401392)
Priority Application: US 83530946 19830912
Designated States: BR GB JP NO
Publication Language: English
Fulltext Word Count: 3469

English Abstract
Apparatus for determining the proportion of water in an oil and water mixture flowing in a pipeline (22). An inner probe member (26) is provided within an outer tube (24) connected in series with the pipeline (22). Electrical leads (28, 30) are connected from the inner and the outer tubes (26, 24) to a temperature compensated oscillator circuit (40). At its output terminal (41, 42) the oscillator circuit produces an oscillating signal, the frequency of which is proportional to the capacitance between the inner probe member (26) and the outer tube (24) is representative of the water to oil ratio. A counter circuit (50) is provided, the input terminals of which are connected to the output terminals (41, 42) of the oscillator circuit (40), for generating a digital count signal at its output terminals (41, 42) representative of the frequency of the oscillating signal. A digital computer circuit (60) having a memory stored with a representation of the relationship between counts per unit of time and the water to oil ratio receives the signal from the counter circuit (50) and generates at its output (61, 62) a digital signal representative of the water to oil ratio of the mixture flowing in the pipeline (22). Means (80, 100) for converting the digital output signal to an analog signal for monitoring or displaying and/or recording is provided. Strapping means (70) are also provided for selecting the range of oil to water ratios for which the computer circuit (60) and the monitoring means (80, 100) will respond.

Japanese Abstract
Appareil permettant de determiner la proportion d'eau dans un melange d'huile et d'eau s'ecoulant dans un pipe-line (22). Une sonde interne (26) est montee dans un tube externe (24) relie en serie au pipe- line

(22). Des conducteurs electriques (28, 30) sont connectes depuis les tubes interne et externe (26, 24) a un circuit oscillateur compense en temperature. A sa borne de sortie (41, 42), le circuit oscillateur produit un signal d'oscillation dont la frequence est proportionnelle a la capacitance entre la sonde interne (26) et le tube externe (24) et representant le rapport eua/huile. Un circuit de comptage (50) est prevu dont les bornes d'entree sont connectees aux bornes de sortie (41, 42) du circuit oscillateur (40) pour produire un signal de comptage numerique a ces bornes de sortie (41, 42) representant la frequence du signal d'oscillation. Un circuit de calcul numerique (60) ayant une memoire dans laquelle est memorisee une representation de la relation entre des comptages par unite de temps et le rapport eau/huile recoit le signal provenant du circuit de comptage (50) et produit a sa sortie (61, 62) un signal numerique representant le rapport eau/huile du melange s'ecoulant dans le pipe-line (22). Des moyens (80, 100) sont prevus pour convertir le signal de sortie numerique en un signal analogique de controle ou d'affichage et/ou d'enregistrement. Des moyens de limitation (70) sont egalement prevus pour selectionner la plage des rapports eau/huile auxquels le circuit de calcul (60) et les moyens de controle (80, 100) sont sensibles.

Fulltext Availability:
Detailed Description
Claims

Detailed Description
... probe member and the outer tube nonlinearly related to the proportion of water in an oil and water mixture flowing in the pipe line, an oscillator circuit means, the input terminals of which are connected between the 'probe member and the...recorder or meter 100 is adapted to function.

The temperature compensated oscillator 40 incorporates a thermistor circuit in order to compensate for changes in ambient temperature. Since the apparatus shown in...

...periods of time in remote locations subject to environmental conditions of ex treme temperature, the thermistor compensated oscillator is provided such that its output response on leads 41 and 42 is...and resistor Rl and lead 44 to the second input of operationsl amplifier Zl. The thermistor R7 is used to compensate for changes in Iff rAk-u-~ OMPI W1 RN temperature. Thus, the thermistor R7 in parallel with R6 and in series with R5 and R8 is used to...

Claim
... 26) and the outer tube (24) nonlinearly related to the proportion of water in an oil and water mixture flowing in the pipeline (22), an oscillator circuit means (40), the input terminals of which (28) (30) are connected between the probe...

...2, char acterized in that the oscillator circuit means (40) is temperature compensated by a thermistor circuit whereby the oscillating signal output from the os cillator circuit means (40) is not...

4/3,AB,KWIC/6 (Item 6 from file: 652)
DIALOG(R)File 652:US Patents Fulltext

00780861
Utility
NET WEIGHT OIL COMPUTER OR THE LIKE

PATENT NO.: 3,906,[redacted]
ISSUED: September 16, 1975 (19750916)
INVENTOR(s): November, Milton H., Hacienda Heights, CA (California), US (United States of America)
ASSIGNEE(s): International Telephone and Telegraph Corporation, (A U.S. Company or Corporation), New York, NY (New York), US (United States of America)
[Assignee Code(s): 41050]
EXTRA INFO: Assignment transaction [Reassigned], recorded April 22, 1985 (19850422)
APPL. NO.: 5-514,222
FILED: October 11, 1974 (19741011)

FULL TEXT: 563 lines

ABSTRACT

A net weight oil computer including a vibration densitometer and a turbine flowmeter . The flowmeter produces output pulses at a frequency directly proportional to the rate of volume flow through a pipeline. The output of the flowmeter is impressed upon the pole of a single pole, double throw electronic switch. One switch contact is connected to an indicator through a divider, a driver amplifier and a counter. The other contact is also connected to an indicator through a divider, a driver amplifier and a counter. The switch is operated by a gate generator connected from the densitometer. The gate generator produces an output pulse of a pulse width directly proportional to the reciprocal of the percent, by weight, of oil or water in the pipeline or some function thereof. A temperature probe is inserted in the line to vary the pulse width or time between pulses in accordance with oil temperature.

ABSTRACT

A net weight oil computer including a vibration densitometer and a turbine flowmeter . The flowmeter produces output pulses at a frequency directly proportional to the rate of volume flow through a pipeline. The output of the flowmeter is impressed upon the pole of a...
...is connected between junctions 24 and 25.

In FIG. 4, variable resistor 477 and the thermistor or temperature probe 421 are connected in succession in that order in series from junction ...

4/3,AB,KWIC/7 (Item 7 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext

01614421
Utility
METHOD AND APPARATUS FOR EVALUATING THE PERFORMANCE OF DIELECTRIC SUBSTANCES

PATENT NO.: 4,686,857
ISSUED: August 18, 1987 (19870818)
INVENTOR(s): Kato, Takayuki, Aichi, JP (Japan)
ASSIGNEE(s): Kabushiki Kaisha Toyota Chuo Kenkyusho, (A Non-U.S. Company or Corporation), Aichi, JP (Japan)
[Assignee Code(s): 85330]
EXTRA INFO: Expired, effective August 23, 1995 (19950823), recorded in O.G. of October 31, 1995 (19951031)
APPL. NO.: 6-585,257
FILED: March 01, 1984 (19840301)

PRIORITY: 58-36384, JP (Japan), March 4, 1983 (19830304)
58-37210, JP (Japan), March 7, 1983 (19830307)
58-42978, JP (Japan), March 14, 1983 (19830314)
58-42979, JP (Japan), March 14, 1983 (19830314)
58-42980, JP (Japan), March 14, 1983 (19830314)
58-62691, JP (Japan), April 8, 1983 (19830408)
58-121411, JP (Japan), July 4, 1983 (19830704)

FULL TEXT: 2071 lines

ABSTRACT

An apparatus for evaluating the performance of a dielectric substance includes: at least a pair of electrodes disposed in contact with the dielectric substance to be measured; a power supply for applying a pulse voltage to the electrodes; a current detector for detecting a transient response current flowing between the electrodes dependent on the component of the dielectric substance disposed between the electrodes; and a signal processor for evaluating the performance of the dielectric substance. The performance evaluation may be performed based on at least one of a peak value of the transient response current at a certain period of time, a difference between the peak value and a value at a fixed period of time after the peak value, and a ratio of the peak value to the difference between the two values. With this method and apparatus, the performance of the dielectric substance can quantitatively be evaluated.

... the basis of a peak value at any desired position of a transient response current flowing through the lubricating oil between the electrodes by applying a pulse voltage to the pair of electrodes.

However, since the peak current value differs dependent on...the gauge support 1D out of the latter. A temperature sensor 60 such as a thermistor for detecting the temperature of the lubricating oil is fixed to the gauge support 1D... the fifteenth embodiment, the peak value at any desired position of the transient response current flowing through the lubricating oil between the electrodes when a pulse voltage is applied to the electrodes, the variation of the current in the fixed period... electrodes in the sensor means, a current detecting means for detecting a transient response current flowing through the engine oil between the electrodes when the pulse voltage is applied by the power supply means to the electrodes in the sensor means...
...said electrodes in said sensor means;
current detecting means for detecting a transient response current flowing through the engine oil between said electrodes when the pulse voltage is applied by said power supply means to said electrodes in said sensor means...

4/3,AB,KWIC/8 (Item 8 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext

01136400
Utility
TEMPERATURE STABILIZATION METHOD

PATENT NO.: 4,245,479
ISSUED: January 20, 1981 (19810120)
INVENTOR(s): Richter, Jr. Albert P., Houston, TX (Texas), US (United States of America)
Peelman, Harold E., Houston, TX (Texas), US (United States of

America)
ASSIGNEE(s): Texaco Inc , (A U.S. Company or Corporation), White Plains, NY (New York), US (United States of America)
[Assignee Code(s): 83832]
APPL. NO.: 5-961,080
FILED: November 15, 1978 (19781115)

This is a division, of application Ser. No. 870,560, filed Jan. 19, 1978.

FULL TEXT: 294 lines

ABSTRACT

A radiation detector assembly is enclosed in a heat pipe which is positioned in a dewar flask. A thermo-electric cooler is joined to one end of the heat pipe. The heat exhaust of the thermo-electric cooler is communicated to a heat dissipation device in the form of a fin assembly. A thermistor senses the temperature at the heat pipe. When the thermistor indicates a temperature in excess of that corresponding to a reference signal, a control signal is produced by a control device to cause a power source to operate the thermo-electric cooler to remove heat from the heat pipe to the fin assembly. The vacuum within the dewar flask effectively limits the environmental heat passing to the heat pipe to radiant heat. The detector assembly and temperature stabilization system may extend to the interior of a conduit or other housing containing material whose radiation is to be detected, while the fin assembly is exposed to the atmosphere. In particular, the temperature stabilization system may be used in conjunction with a detector comprising a scintillation crystal optically coupled to a photomultiplier tube in an environment which would otherwise diminish the performance of such a detector by raising its temperature.

ABSTRACT

... is communicated to a heat dissipation device in the form of a fin assembly. A thermistor senses the temperature at the heat pipe. When the thermistor indicates a temperature in excess of that corresponding to a reference signal, a control signal...
... pulse signal before it is transmitted to appropriate data processing equipment used to analyze the pulse data to acquire information concerning the oil flowing in the pipeline.

In order to function optimally, the scintillation crystal, photomultiplier tube and amplifier...

...from the thermo-electric cooler into the atmosphere.

A temperature sensing device, such as a thermistor , is applied to the heat pipe to determine its temperature. The thermistor is electrically connected to a control system which then receives an information signal from the thermistor reflecting the value of the temperature measured at the heat pipe. ... in response to the comparison between the information signal and the reference signal. Whenever the thermistor senses that the temperature of the heat pipe exceeds that of the reference temperature, the ...

... removal device such as a thermo-electric cooler. A temperature sensing device, such as a thermistor , is also provided to determine the temperature value at the heat pipe. Further, a control...
... plug 22 of similar good thermal conducting material. A temperature sensing device, such as a thermistor , 24 is embedded in, or otherwise joined to the plug 22. The plug 22 is...

...pipe 20 so as to form a good thermal conduction path therebetween. Thus,

with the thermistor 24 in thermal communication with the plug 22, the temperature of the plug as well...

...of the lower end of heat pipe 20 may be determined by way of the thermistor .

A heat removed device, such as a thermo-electric cooler, 26 is joined to the...

... the collar 16. Similarly, appropriate leads 46 pass along the heat pipe 20 from the thermistor 24 and through the passage 16a. A cable connector 48 is provided at the collar 16, and an appropriate cable 50, joined thereto, continues the electrical conductors from the thermistor 24 and the radiation detector assembly 36 to external electronics.

Signal processing circuitry for analyzing...
...temperature of the heat pipe 20 at a predetermined value.

Values of resistance of the thermistor 24 are read at the control circuitry 52 as an information input signal reflecting the...of the control signal is determined by the difference between the information signal from the thermistor 24 and the reference temperature signal. Thus, whenever the comparison of these two latter signals indicates that the temperature measured by the thermistor 24 at the heat pipe 20 is greater than the reference temperature, the control signal...

... substantially enclose the radiation detector assembly at 36. A temperature sensing device, such as the thermistor 24, is provided to sense the temperature at the heat pipe 20, and a heat...

... heat from the heat pipe. The temperature of the heat pipe, as indicated by the thermistor 24, is compared to a reference temperature, or corresponding signal value. Whenever the comparison indicates...

4/3,AB,KWIC/9 (Item 9 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext

01115773
Utility
FLOW DETECTION SYSTEM

PATENT NO.: 4,225,778
ISSUED: September 30, 1980 (19800930)
INVENTOR(s): Ghahramani, Iraj, Los Angeles, CA (California), US (United States of America)
ASSIGNEE(s): International Telephone and Telegraph Corporation, (A U.S. Company or Corporation), New York, NY (New York), US (United States of America)
[Assignee Code(s): 41050]
EXTRA INFO: Assignment transaction [Reassigned], recorded April 22, 1985 (19850422)
APPL. NO.: 6-32,557
FILED: April 23, 1979 (19790423)

FULL TEXT: 308 lines

ABSTRACT

A net oil computer including a mean density electric current source that alternately supplies all of or a portion of water density and oil density electric currents with the differences between the mean and water currents

and between the meas and oil currents alternately charging and discharging a capacitor between two different voltage levels or vice versa. A bistable circuit switches the capacitor to charge and discharge when the capacitor voltage reaches the respective two different levels. One or both of the capacitor charging and discharging periods may then be used to gate turbinemeter pulses , the number of which is proportional to total oil flow and/or total water flow in a pipeline.

ABSTRACT

... both of the capacitor charging and discharging periods may then be used to gate turbinemeter pulses , the number of which is proportional to total oil flow and/or total water flow in a pipeline.
...I sub w may be considered constant, if desired. Alternatively, a resistance temperature probe or thermistor may be employed in pipeline 473 and used in series with or parallel with a...

4/3,AB,KWIC/10 (Item 10 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext

01087430

Utility
TEMPERATURE STABILIZATION SYSTEM

PATENT NO.: 4,199,953
ISSUED: April 29, 1980 (19800429)
INVENTOR(s): Richter, Jr. Albert P., Houston, TX (Texas), US (United States of America)
Peelman, Harold E., Houston, TX (Texas), US (United States of America)
ASSIGNEE(s): Texaco Inc , (A U.S. Company or Corporation), White Plains, NY (New York), US (United States of America)
[Assignee Code(s): 83832]
APPL. NO.: 5-870,560
FILED: January 19, 1978 (19780119)

FULL TEXT: 319 lines

ABSTRACT

A radiation detector assembly is enclosed in a heat pipe which is positioned in a dewar flask. A thermo-electric cooler is joined to one end of the heat pipe. The heat exhaust of the thermo-electric cooler is communicated to a heat dissipation device in the form of a fin assembly. A thermistor senses the temperature at the heat pipe. When the thermistor indicates a temperature in excess of that corresponding to a reference signal, a control singal is produced by a control device to cause a power source to operate the thermo-electric cooler to remove heat from the heat pipe to the fin assembly. The vacuum within the dewar flask effectively limits the environmental heat passing to the heat pipe to radiant heat. The detector assembly and temperature stabilization system may extend to the interior of a conduit or other housing containing material whose radiation is to be detected, while the fin assembly is exposed to the atmosphere. In particular, the temperature stabilization system may be used in conjunction with a detector comprising a scintillation crystal optically coupled to a photomultiplier tube in an environment which would otherwise diminish the performance of such a detector by raising its temperature.

ABSTRACT

... is communicated to a heat dissipation device in the form of a fin assembly. A thermistor senses the temperature at the heat pipe. When the thermistor indicates a temperature in excess of that corresponding to a reference signal, a control singal...
... pulse signal before it is transmitted to appropriate data processing equipment used to analyze the pulse data to acquire information concerning the oil flowing in the pipeline.

In order to function optimally, the scintillation crystal, photomultiplier tube and amplifier...

...from the thermo-electric cooler into the atmosphere.

A temperature sensing device, such as a thermistor , is applied to the heat pipe to determine its temperature. The thermistor is electrically connected to a control system which then receives an information signal from the thermistor reflecting the value of the temperature measured at the heat pipe. ... in response to the comparison between the information signal and the reference signal. Whenever the thermistor senses that the temperature of the heat pipe exceeds that of the reference temperature, the ...

... heat removal device such as a thermoelectric cooler. A temperature sensing device, such as a thermistor , is also provided to determine the temperature value at the heat pipe. Further, a control...
... plug 22 of similar good thermal conducting material. A temperature sensing device, such as a thermistor , 24 is embedded in, or otherwise joined to the plug 22. The plug 22 is...

...pipe 20 so as to form a good thermal conduction path therebetween. Thus, with the thermistor 24 in thermal communication with the plug 22, the temperature of the plug as well...

...of the lower end of heat pipe 20 may be determined by way of the thermistor .

A heat removal device, such as a thermo-electric cooler, 26 is joined to the...

... the collar 16. Similary, appropriate leads 46 pass along the heat pipe 20 from the thermistor 24 and through the passage 16a. A cable connector 48 is provided at the collar 16, and an appropriate cable 50, joined thereto, continues the electrical conductors from the thermistor 24 and the radiation detector assembly 36 to external electronics.

Signal processing circuitry for analyzing...
...temperature of the heat pipe 20 at a predetermined value.

Values of resistance of the thermistor 24 are read at the control circuitry 52 as an information input signal reflecting the...of the control signal is determined by the difference between the information signal from the thermistor 24 and the reference temperature signal. Thus, whenever the comparison of these two latter signals indicates that the temperature measured by the thermistor 24 at the heat pipe 20 is greater than the reference temperature, the control signal...

... substantially enclose the radiation detector assembly at 36. A temperature sensing device, such as the thermistor 24, is provided to sense the temperature at the heat pipe 20, and a heat...

... heat from the heat pipe. The temperature of the heat pipe, as indicated by the thermistor 24, is compared to a reference temperature, or

corresponding reference signal value. Whenever the comparison...
...5. A system as defined in claim 4 wherein said temperature sensing means comprises a thermistor .

6. A system as defined in claim 5 further comprising vacuum chamber means for at...

...9. A system as defined in claim 1 wherein said temperature sensing means comprises a thermistor .

10. A system as defined in claim 1 wherein said detector assembly and said temperature...

4/3,AB,KWIC/11 (Item 11 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02460131
Utility
ELECTRODE STRUCTURE OF METALLIC PARTICLE DETECTING SENSOR

PATENT NO.: 5,457,396
ISSUED: October 10, 1995 (19951010)
INVENTOR(s): Mori, Akira, Hiratsuka, JP (Japan)
Uchino, Ikuo, Hiratsuka, JP (Japan)
Hirosawa, Atsuhiko, Hiratsuka, JP (Japan)
Yamasaki, Kunihiro, Hiratsuka, JP (Japan)
ASSIGNEE(s): Kabushiki Kaisha Komatsu Seisakusho, (A Non-U.S. Company or Corporation), Tokyo, JP (Japan)
[Assignee Code(s): 46639]
APPL. NO.: 8-119,067
FILED: September 14, 1993 (19930914)
PRIORITY: 3-085832, JP (Japan), March 27, 1991 (19910327)
PCT: PCT-JP92-00356 (WO 92JP356)
Section 371 Date: September 14, 1993 (19930914)
Section 102(e) Date: September 14, 1993 (19930914)
Filing Date: March 24, 1992 (19920324)
Publication Number: WO92-17772 (WO 9217772)
Publication Date: October 15, 1992 (19921015)

FULL TEXT: 281 lines

ABSTRACT

An electrode structure of a metallic particle detecting sensor capable of detecting with high efficiency metal powders floating in a wide range in an oil tank. The electrode structure is formed by opposing, on a substrate, a pair of electrodes (1, 2), formed of thin film metals of such as Ta, W, Pt, Cr, Au or the like, having combed (toothed) structures with their respective teeth being meshed or interdigitated with each other.

...relationship between the graph showing a particle diameter of a metallic particle in a lubrication oil and a pulse generating frequency; and

FIG. 5 is a flow chart showing a sequence of calculating a distribution of metallic particle diameters.
... embodiment, it is possible to bond a temperature detecting element 9 (FIG. 2) such as thermistor onto the back side surface of the substrate 6, thereby detecting the temperature as well...

4/3,AB,KWIC/12 (Item 12 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02377205

Utility

ENGINE OIL MONITORING SYSTEM HAVING AN IN-VEHICLE DISPLAY OF THE CURRENT STATUS OF THE OIL

PATENT NO.: 5,382,942
ISSUED: January 17, 1995 (19950117)
INVENTOR(s): Raffa, James M., Rochester, MI (Michigan), US (United States of America)
Cwik, Terry T., Livonia, MI (Michigan), US (United States of America)
Aronow, Michael F., Southfield, MI (Michigan), US (United States of America)
Little, Winston A., Plymouth, MI (Michigan), US (United States of America)
Meitzler, Allen H., Ann Arbor, MI (Michigan), US (United States of America)
Misangyi, Peter W., Novi, MI (Michigan), US (United States of America)
Nix-Gomez, Jame A., Bristol, GB (United Kingdom).England
Saloka, George S., Dearborn, MI (Michigan), US (United States of America)
Walker, Noel A., Birmingham, MI (Michigan), US (United States of America)
ASSIGNEE(s): Ford Motor Company, (A U.S. Company or Corporation), Dearborn, MI (Michigan), US (United States of America)
[Assignee Code(s): 31496]
APPL. NO.: 8-86,073
FILED: July 06, 1993 (19930706)

FULL TEXT: 910 lines

ABSTRACT

An oil monitoring system storing a remaining percent tachometer oil life, a remaining percent time oil life and a remaining percent odometer oil life. The oil monitoring system has means for selecting and displaying the lowest of these three remaining percent oil life values as the lowest remaining percent oil life. The selected lowest remaining percent oil life is compared to predetermined percentages to display on an in-vehicle display if the oil is OK, if the oil is to be changed soon, or if an oil change is required. The oil monitoring system may include an oil dielectric constant sensor and display if the oil is to be changed soon or an oil change is required as a function in the change in the oil's dielectric constant.

...FIG. 6 is a flow diagram of the Odometer Increment subroutine;

FIG. 7 is a flow diagram of the Tachometer Pulse Increment subroutine;

FIG. 8 is a flow diagram of the Low Oil Correction subroutine;

FIG. 9 is a flow diagram of an alternate embodiment of the Low...
... 14 which is used to lubricate the engine 10. An oil temperature sensor, such as thermistor 16, and an oil level sensor 18 are disposed inside the oil sump 12 and...theta sub 2 may correspond to signals generated by the

temperature sensor 36 when the thermistor is either shorted or open, respectively.

When the measured temperature theta is within the desired...

4/3,AB,KWIC/13 (Item 13 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02216059
Utility
METHOD AND APPARATUS FOR MEASURING THE DENSITY OF A LIQUID

PATENT NO.: 5,237,853
ISSUED: August 24, 1993 (19930824)
INVENTOR(s): Cassaday, Ernest W., Apache Junction, AZ (Arizona), US (United States of America)
Roundy, James S., Gilbert, AZ (Arizona), US (United States of America)
ASSIGNEE(s): AlliedSignal Inc , (A U.S. Company or Corporation), Morris Township, Morris County, NJ (New Jersey), US (United States of America)
[Assignee Code(s): 1960]
APPL. NO.: 7-944,816
FILED: September 14, 1992 (19920914)

This is a continuation of application Ser. No. 07-597,945, filed Oct. 15, 1990, now abandoned.

FULL TEXT: 296 lines

ABSTRACT

A process for monitoring fluid density by use of a fluidic jet oscillator (26) absent the necessity for a high-precision pressure regulator. Fluid is delivered to the fluidic oscillator (26) via a pressure divider (28). As the fluid flows through the oscillator the latter generates a pressure wavetrain at a frequency which is indicative of the density of the fluid, but is inaccurate to the extent that the pressure difference across the oscillator varies from a predetermined value. A differential pressure transducer (30) senses the pressure difference. Accordingly, the process is adapted for use with a gated sampling and control system (84) which operatively responds to the oscillator output only when the differential pressure is substantially in accord with a predetermined value thereof.

... a single piezoelectric transducer 32 rather than to separate transducers, and that it incorporates a thermistor 34 to monitor the temperature of the oil. Accordingly, the oscillator 26 in operation generates...
... a wire 36 to an external electronic processor 38. The differential pressure transducer 30 and thermistor 34 are elements of external circuit branches (indicated by lines 40, 42) connected to the...

... pressure divider 28 by the provision of a first-bore 78, and to receive the thermistor 34 and differential pressure transducer 30 by the provision of a second bore 80. The differential pressure transducer 30, thermistor 34, and pressure divider 28 are inserted in the indicated bores 78, 80 and rigidly... 70 are adapted to provide for electrical communication from the differential pressure transducer 30 and thermistor 34 to a cylindrical boss 82 which is rigidly secured to the mounting plate

70...

... center port 60, along the supply passage 64, and to the supply port of the oscillator 26. As the oil flows through the oscillator 26 to the vent passage 24, the oscillator generates a fluidic wavetrain having a frequency which depends on the density of the oil...

... accumulator register 94 receives the differential frequency count, and receives the temperature signal from the thermistor 34. The latter signal is employed in the accumulator register 94 to bias the least...

4/3,AB,KWIC/14 (Item 14 from file: 654)
DIALOG(R)File 654:US PAT.FULL.

02173305
Utility
OVERHEAT DETECTING APPARATUS FOR ENGINE
[Ignition timing control apparatus]

PATENT NO.: 5,201,284
ISSUED: April 13, 1993 (19930413)
INVENTOR(s): Umehara, Kazuhiro, Shizuoka, JP (Japan)
ASSIGNEE(s): Suzuki Motor Corporation, (A Non-U.S. Company or Corporation), Shizuoka, JP (Japan)
[Assignee Code(s): 82042]
APPL. NO.: 7-884,063
FILED: May 15, 1992 (19920515)
PRIORITY: 2-172316, JP (Japan), June 29, 1990 (19900629)
2-172317, JP (Japan), June 29, 1990 (19900629)

This is a division of Ser. No. 07-720,740, filed Jun. 25, 1991 now U.S. Pat. No. 5,133,303.

FULL TEXT: 584 lines

ABSTRACT

A method and apparatus for detecting engine overheating and controlling engine ignition timing utilizes a single temperature sensor. The temperature sensor is positioned adjacent a cylinder head of an engine. A rate of engine temperature increase is calculated based on engine temperature information produced by the temperature sensor, and engine speed is regulated based on the calculated rate of engine temperature increase. Ignition timing is also controlled in response to the engine temperature information produced by the temperature sensor, and the engine speed is regulated to a predetermined speed value whenever the engine temperature exceeds a predetermined temperature value.

...in FIG. 1 are attached;

FIG. 4 is a diagram showing the characteristics of a thermistor which is used as a temperature sensor in FIG. 1;

FIG. 5 is a diagram...

...temperature sensor of FIG. 1;

FIG. 9 is a diagram showing the characteristic of a thermistor used in a temperature sensor of FIG. 1;

FIG. 10 is an explanatory diagram showing...
... 12, an engine temperature signal from an engine temperature sensor SE1, and signals of an oil level sensor SE2, an oil flow sensor SE3, etc. This control unit comprises pulser coils 2 to 5 connected to a noise filter 50, a trigger output buffer 53...temperature sensor SE1 attached to the cylinder head or in the neighborhood thereof uses a thermistor having a characteristic that a resistance value thereof is decreased as temperature becomes higher as...

... less (see FIG. 4), the microcomputer circuit 52 determines that the resistance value of the thermistor is R sub 0 or more, and the spark advancing time of the starting time...

... s) C.] or more, the microcomputer circuit 52 determines that the resistance value of the thermistor is R sub 1 or less, and the spark advancing time of the starting time...

... less at the starting time of the engine, the resistance value of the temperature sensor (thermistor) SE1 is already at least R sub 0 ohms (see FIG. 4). Referring to the...temperature sensor SE1 functioning as a sensor for detecting engine overheating also uses the sensor (thermistor) which is used for switching the spark advancing time of the engine starting time previously... rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a condition for starting spark advancement... spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in FIG. 9. Normal and abnormal rising characteristics of engine...

...the engine temperature T reaches t sub 5 at 303 (the resistance value of the thermistor in FIG. 9 is R sub 5 [OMEGA] at this time), the microcomputer circuit 52...

... than or equal to overheat warning canceling temperature t' sub 5 [degree(s) C.] (the thermistor resistance value from FIG. 9 is R' sub 5 [OMEGA] at this time). If T...

02098709

Utility
OVERHEAT DETECTING APPARATUS FOR ENGINE

PATENT NO.: 5,133,303
ISSUED: July 28, 1992 (19920728)
INVENTOR(s): Umehara, Kazuhiro, Shizuoka, JP (Japan)
ASSIGNEE(s): Suzuki Motor Corporation, (A Non-U.S. Company or Corporation), Shizuoka, JP (Japan)
[Assignee Code(s): 82042]
APPL. NO.: 7-720,740
FILED: June 25, 1991 (19910625)
PRIORITY: 2-172316, JP (Japan), June 29, 1990 (19900629)
2-172317, JP (Japan), June 29, 1990 (19900629)

FULL TEXT: 605 lines

ABSTRACT

A method and apparatus for detecting engine overheating and controlling engine ignition timing utilizes a single temperature sensor. The temperature sensor is positioned adjacent a cylinder head of an engine. A rate of engine temperature increase is calculated based on engine temperature information produced by the temperature sensor, and engine speed is regulated based on the calculated rate of engine temperature increase. Ignition timing is also controlled in response to the engine temperature information produced by the temperature sensor, and the engine speed is regulated to a predetermined speed value whenever the engine temperature exceeds a predetermined temperature value.

...in FIG. 1 are attached;

FIG. 4 is a diagram showing the characteristics of a thermistor which is used as a temperature sensor in FIG. 1;

FIG. 5 is a diagram...

...temperature sensor of FIG. 1;

FIG. 9 is a diagram showing the characteristic of a thermistor used in a temperature sensor of FIG. 1;

FIG. 10 is an explanatory diagram showing...

... 12, an engine temperature signal from an engine temperature sensor SE1, and signals of an oil level sensor SE2, an oil flow sensor SE3, etc. This control unit comprises pulser coils 2 to 5 connected to a noise filter 50, a trigger output buffer 53...temperature sensor SE1 attached to the cylinder head or in the neighborhood thereof uses a thermistor having a characteristic that a resistance value thereof is decreased as temperature becomes higher as...

... less (see FIG. 4), the microcomputer circuit 52 determines that the resistance value of the thermistor is R sub o or more, and the spark advancing time of the starting time...

... s) C]or more, the microcomputer circuit 52 determines that the resistance value of the thermistor is R sub 1 or less, and the spark advancing time of the starting time...

... less at the starting time of the engine, the resistance value of the temperature sensor (thermistor) SE1 is already at least R sub o ohms (see FIG. 4). Referring to the... sensor SE1 functioning as a sensor for detecting the engine overheating also uses the sensor (thermistor) which is used for switching the spark advancing time of the engine starting time previously... rising rate value can be preset and judged under various conditions; and (3) since a thermistor is used as a temperature sensor, it is inexpensive compared with a bimetallic sensor in which ON-OFF operation is performed, and the thermistor can also be used as a sensor for determining a condition for starting spark advancement... spark advancing time which was previously described. The relation between temperature and resistance for the thermistor of sensor SE1 is shown in FIG. 9. Normal and abnormal rising characteristics of engine...

...the engine temperature T reaches t sub 5 at 303 (the resistance value of the thermistor in FIG. 9 is R sub 5 [0] at this time), the microcomputer circuit 52...

... than or equal to overheat warning canceling temperature t' sub 5 [degree(s) C] (the thermistor resistance value from FIG. 9 is R' sub 5 [

OMEGA] at this time, If T...

FILES SEARCHED:

```
  File   9:Business & Industry(R)  Jul/1994-2001/Jun 26
         (c) 2001 Resp. DB Svcs.
  File  15:ABI/Inform(R)  1971-2001/Jun 27
         (c) 2001 ProQuest Info&Learning
  File  16:Gale Group PROMT(R)  1990-2001/Jun 26
         (c) 2001 The Gale Group
  File  18:Gale Group F&S Index(R)  1988-2001/Jun 26
         (c) 2001 The Gale Group
  File  20:World Reporter  1997-2001/Jun 27
         (c) 2001 The Dialog Corporation
*File  20: Duplicate Detection is currently not working in file 20
  File 148:Gale Group Trade & Industry DB  1976-2001/Jun 26
         (c)2001 The Gale Group
  File 160:Gale Group PROMT(R)  1972-1989
         (c) 1999 The Gale Group
  File 256:SoftBase:Reviews,Companies&Prods.  85-2001/May
         (c)2001 Info.Sources Inc
*File 256: Please note new price changes effective May 1, 2001.
See Help Rates256 for details.
  File 275:Gale Group Computer DB(TM)  1983-2001/Jun 26
         (c) 2001 The Gale Group
  File 481:DELPHES Eur Bus  95-2001/Jun W4
         (c) 2001 ACFCI & Chambre CommInd Paris
*File 481: This file has resumed updating.
  File 583:Gale Group Globalbase(TM)  1986-2001/Jun 26
         (c) 2001 The Gale Group
  File 621:Gale Group New Prod.Annou.(R)  1985-2001/Jun 26
         (c) 2001 The Gale Group
  File 624:McGraw-Hill Publications  1985-2001/Jun 21
         (c) 2001 McGraw-Hill Co. Inc
  File 635:Business Dateline(R)  1985-2001/Jun 23
         (c) 2001 ProQuest Info&Learning
  File 636:Gale Group Newsletter DB(TM)  1987-2001/Jun 26
         (c) 2001 The Gale Group
  File 647:CMP  Computer Fulltext  1988-2001/Jun W3
         (c) 2001 CMP
  File 674:Computer News Fulltext  1989-2001/Jun W3
         (c) 2001 IDG Communications
  File 696:DIALOG Telecom. Newsletters  1995-2001/Jun 26
         (c) 2001 The Dialog Corp.
  File   2:INSPEC  1969-2001/Jun W4
         (c) 2001 Institution of Electrical Engineers
  File   6:NTIS  1964-2001/Jul W2
         Comp&distr  2000 NTIS, Intl Cpyrght All Right
*File   6: See HELP CODES6 for a short list of the Subject Heading Codes
(SC=, SH=) used in NTIS.
  File   8:Ei Compendex(R)  1970-2001/Jun W4
         (c) 2001 Engineering Info. Inc.
*File   8: New price changes effective May 1, 2001.See Help Rates8.
Truncate CC codes for complete retrieval.UDs were adjusted.
  File  14:Mechanical Engineering Abs  1973-2001/May
         (c) 2001 Cambridge Sci Abs
  File  31:World Surface Coatings Abs  1976-2001/Jun
         (c) 2001 Paint Research Assn.
*File  31: There is no data missing. UDs have been adjusted to reflect
the current months data. See Help News31 for details.
  File  32:METADEX(R)  1966-2001/Aug B2
         (c) 2001 Cambridge Scientific Abs
```

*File 32: See Help Codes32 for a list of the Alloy Class Codes(CC=)
and Alloy Class Names(CN=) used in Metadex.
File 33:Aluminium Ind Abs 1968-2001/Jul
(c) 2001 Cambridge Scientific Abs
File 34:SciSearch(R) Cited Ref Sci 1990-2001/Jun W4
(c) 2001 Inst for Sci Info
File 35:Dissertation Abs Online 1861-2001/Jul
(c) 2001 ProQuest Info&Learning
File 63:Transport Res(TRIS) 1970-2001/May
(c) fmt only 2001 Dialog Corp.
File 65:Inside Conferences 1993-2001/Jun W3
(c) 2001 BLDSC all rts. reserv.
*File 65: CD=2000 and CY=2000 are not fully functioning.
Please see Help News65 for details.
File 87:TULSA (Petroleum Abs) 1965-2001/Jul W1
(c)2001 The University of Tulsa
File 94:JICST-EPlus 1985-2001/Jun W1
(c)2001 Japan Science and Tech Corp(JST)
*File 94: There is no data missing. UDs have been adjusted to reflect
the current months data. See Help News94 for details.
File 96:FLUIDEX 1972-2001/Jun
(c) 2001 Elsevier Science Ltd.
*File 96: Please note new price changes effective February 1, 2001.
See Help Rates96 for details.
File 99:Wilson Appl. Sci & Tech Abs 1983-2001/May
(c) 2001 The HW Wilson Co.
File 103:Energy SciTec 1974-2001/Jun B1
(c) 2001 Contains copyrighted material
*File 103: For updates please see Help News103.
For access restrictions, see HELP RESTRICT.
File 108:AEROSPACE DATABASE 1962-2001/JUN
(c) 2001 AIAA
*File 108: For update information please see Help News108.
File 118:ICONDA-Intl Construction 1976-2001/Jun
(c) 2001 Fraunhofer-IRB
File 144:Pascal 1973-2001/Jun W4
(c) 2001 INIST/CNRS
File 238:Abs. in New Tech & Eng. 1981-2001/May
(c) 2001 Reed-Elsevier (UK) Ltd.
File 239:Mathsci 1940-2001/Aug
(c) 2001 American Mathematical Society
File 240:PAPERCHEM 1967-2001/Jun W2
(c) 2001 IPST
File 248:PIRA 1975-2001Jul W3
(c) 2001 Pira International
File 293:Eng Materials Abs(R) 1986-2001/Jul
(c) 2001 Cambridge Scientific Abs
File 315:ChemEng & Biotec Abs 1970-2001/May
(c) 2001 DECHEMA
File 323:RAPRA Rubber & Plastics 1972-2001/Jul
(c) 2001 RAPRA Technology Ltd
File 335:Ceramic Abstracts 1976-2001/Q2
(c) 2001 Cambridge Scientific Abs.
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info
File 111:TGG Natl.Newspaper Index(SM) 1979-2001/Jun 26
(c) 2001 The Gale Group
File 211:Gale Group Newsearch(TM) 2001/Jun 26
(c) 2001 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2001/Jun
(c) 2001 Info. Today Inc.
File 278:Microcomputer Software Guide 2001/Jun

(c) 2001 Reed Elsevier Inc.
File 608:KR/T Bus.News. 1992-2001/Jun 27
(c)2001 Knight Ridder/Tribune Bus News
File 77:Conference Papers Index 1973-2001/Jul
(c) 2001 Cambridge Sci Abs
File 92:IHS Intl.Stds.& Specs. 1999/Nov
(c) 1999 Information Handling Services
*File 92: Due to IP format changes the file will not update for several months.
File 202:Information Science Abs. 1966-2001/ISSUE 04
(c) Information Today, Inc
*File 202: The file now includes e-journals. For more information see Help News202.
File 241:Elec. Power DB 1972-1999Jan
(c) 1999 Electric Power Research Inst.Inc
*File 241: This file is closed (no updates)
File 420:UnCover 1988-2001/May 31
(c) 2001 The UnCover Company
*File 420: This file is closed (no updates). Please check rates for important information about patent collections and availability.
File 266:FEDRIP 2001/Jun
Comp & dist by NTIS, Intl Copyright All Rights Res
File 80:TGG Aerospace/Def.Mkts(R) 1986-2001/Jun 26
(c) 2001 The Gale Group
File 109:Nuclear Sci. Abs. 1948-1976
(c)1997 Contains copyrighted material
*File 109: For access restrictions, see HELP RESTRIC1.
File 440:Current Contents Search(R) 1990-2001/Jul W2
(c) 2001 Inst for Sci Info

ABSTRACTS AND KWIC OF PUBLICATIONS CONTAINING THE KEYWORDS "(PULS? OR OSCILL?)(5N)FLOW?(5N)OIL? ? AND THERMISTOR?"

2/3,AB,KWIC/1 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00889971 95-39363
Fluids, conductors, and conditioners
Anonymous
Machine Design v66n12 PP: 446-466 Jun 1994 ISSN: 0024-9114 JRNL CODE: MDS
WORD COUNT: 15063

ABSTRACT: Constructing a hydraulic or pneumatic system involves the design or selection of numerous components, and the determination of how they will all interact. A point that is often overlooked is that the fluid, and the means of moving it from one location to another, are critical in any fluid-powered system. Because the functions of hydraulic fluid are rather basic - to transmit power efficiently and lubricate moving parts, with low maintenance - it is often taken for granted. However, using the wrong fluid, or not maintaining it properly, means less than optimum performance, and can even destroy a system. In addition to fluids, the various lines that transmit fluid - tubing, hose, and connectors - and the components that keep the fluid in good working order - heat exchangers, filters, lubricators, and dryers - are essential ingredients to fluid-power systems. Various fluids and components of fluid-powered systems are discussed.

...TEXT: difficulties are not insurmountable. Flow paths that are too tortuous or lengthy for a direct-flow lubricator may present no problem

to a recirculating flow lubricator. And pulse lubricators are available for still more difficult applications.

Direct-flow lubricators spray a mist of oil directly into the air line. They are inexpensive, and can adequately lubricate most pneumatic systems ...to the lower wall. Flow oscillation is a linear function of flow rate. A heated thermistor placed in the upper feedback passage measures oscillation rate, and hence flow.

Jet-deflection meters...

2/3,AB,KWIC/2 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6120257 INSPEC Abstract Number: A1999-03-8180-002
Title: Some temperature field results from the thermocapillary flow experiment aboard USML-2 spacelab
Author(s): Kamotani, Y.; Ostrach, S.; Pline, A.
Author Affiliation: Case Western Reserve Univ., Cleveland, OH, USA
Journal: Advances in Space Research Conference Title: Adv. Space Res. (UK) vol.22, no.8 p.1189-95
Publisher: Elsevier,
Publication Date: Oct. 1998 Country of Publication: UK
CODEN: ASRSDW ISSN: 0273-1177
SICI: 0273-1177(199810)22:8L.1189:STFR;1-2
Material Identity Number: B949-1998-020
U.S. Copyright Clearance Center Code: 0273-1177/98/$19.00+0.00
Conference Title: Gravitational Effects in Fluid and Materials Science. G0.1 Symposium of COSPAR Scientific Commission G held during Thirty-first COSPAR Scientific Assembly
Conference Sponsor: COSPAR; UN Office for Outer Space Affairs
Conference Date: 14-21 July 1996 Conference Location: Birmingham, UK
Language: English
Abstract: Some temperature field results are reported of the thermocapillary flow experiments conducted on board the space shuttle. In the experiments oscillatory thermocapillary flows were investigated in cylindrical containers filled with silicone oil . Three different container diameters and two types of heating mode were used to study their effects on the oscillation phenomenon. An infrared imaging system recorded the oil surface temperature. A movable thermistor probe measured the fluid temperature. Numerical analysis was also performed to supplement the experiments. The results from those measurements and the analysis are presented and discussed herein.
Subfile: A

Abstract: Some temperature field results are reported of the thermocapillary flow experiments conducted on board the space shuttle. In the experiments oscillatory thermocapillary flows were investigated in cylindrical containers filled with silicone oil . Three different container diameters and two types of heating mode were used to study their ...

... on the oscillation phenomenon. An infrared imaging system recorded the oil surface temperature. A movable thermistor probe measured the fluid temperature. Numerical analysis was also performed to supplement the experiments. The...

2/3,AB,KWIC/3 (Item 1 from file: 315)

DIALOG(R)File 315:Chemeng & Biotec Abs

131133 CEABA Accession No.: 14-12-017094 DOCUMENT TYPE: Journal
Title: Correlative volume flow measurement of mineral oils with pseudo-random heat pulses
Orig. Title: Korrelative Volumenstrom-Messung von Mineraloelen mit pseudozufaelligen Waerme-Impulsen
AUTHOR: Witte, W.; Baier, P.W.
JOURNAL: Chemie Ingenieur Technik, Volume: 55, Issue: 10, Page(s): 795
CODEN: CITEAH ISSN: 0009-286
PUBLICATION DATE: 1983 (830000) LANGUAGE: German
ABSTRACT: Kurzfassung (Original auf Bestellung: 36 S.,16 B.,2 Tab., 21 Q) Entwicklung eines mittelbaren Messverfahrens fuer kleine Volumenstroeme in einphasigen Stroemungsmitteln auf Basis der Laufzeitmessung markierter Stroemungsmittel-Teilchen. Vorstellung der Apparatur zur Laufzeitmessung am Beispiel der Messung von Dieselkraftstoff fuer den Volumenstrom-Bereich 2-30 lh. Die thermischen Markierungen werden als Waerme-Impulse bezeichnet. Aus der Laufzeit der Waerme-Impulse entlang einer vorgegebenen Messstrecke in einem laminar durchstroemten Messrohr wird der gesamte Volumenstrom ermittelt. Versuchsaufbau: Messrohr mit zwei in der Mitte des Stroemungsquerschnitts installierten Miniatur-Thermistoren zur Erzeugung und Detektion von Waerme-Impulsen und einer Ansteuer-Elektronik. Erzeugung der Waerme-Impulse durch kurzzeitiges Aufheizen des Thermistors . Indirekte Messung der Laufzeit durch Kreuzkorrelation der Ein- und Ausgangssignale. Das Auftreten eines Stoersignals durch zufaellige Temperaturschwankungen des Stroemungsmittels kann zu einem Messfehler fuehren. Mikroprozessor-Steuerung. (Ebert)

Title: Correlative volume flow measurement of mineral oils with pseudo-random heat pulses
...ABSTRACT: der gesamte Volumenstrom ermittelt. Versuchsaufbau: Messrohr mit zwei in der Mitte des Stroemungsquerschnitts installierten Miniatur-Thermistoren zur Erzeugung und Detektion von Waerme-Impulsen und einer Ansteuer-Elektronik. Erzeugung der Waerme-Impulse durch kurzzeitiges Aufheizen des Thermistors . Indirekte Messung der Laufzeit durch Kreuzkorrelation der Ein- und Ausgangssignale. Das Auftreten eines Stoersignals durch...

Subaccount is set to [redacted]26 SEE LOG DLF BILLABLE

PATENT RESULTS

FILES SEARCHED:

File 123:CLAIMS(R)/Current Legal Status 1980-2001/Jun 19
(c) 2001 IFI/CLAIMS
*File 123: Price changes as of 1/1/01. Please see HELP RATES 123.
*** Reassignment data is current through Feb. 2, 2001 recordings.
File 340:CLAIMS(R)/US PATENT 1950-01/Jun 19
(c) 2001 IFI/CLAIMS(R)
*File 340: Price changes as Of 1/1/01. Please see HELP RATES 340.
File 342:Derwent Patents Citation Indx 1978-01/200129
(c) 2001 Derwent Info Ltd
*File 342: Price changes as of 1/1/01. Please see HELP RATES 342.
File 344:CHINESE PATENTS ABS APR 1985-2001/May
(c) 2001 EUROPEAN PATENT OFFICE
File 345:Inpadoc/Fam.& Legal Stat 1968-2001/UD=200124
(c) 2001 EPO
*File 345: IDPAT is temporarily not working.
File 347:JAPIO OCT 1976-2001/Feb(UPDATED 010604)
(c) 2001 JPO & JAPIO
*File 347: JAPIO data problems with year 2000 records are now fixed.
Alerts have been run. See HELP NEWS 347 for details.
File 348:EUROPEAN PATENTS 1978-2001/Jun W03
(c) 2001 European Patent Office
File 349:PCT Fulltext 1983-2001/UB=20010614, UT=20010531
(c) 2001 WIPO/MicroPat
File 351:Derwent WPI 1963-2001/UD,UM &UP=200135
(c) 2001 Derwent Info Ltd
*File 351: Price changes as of 1/1/01. Please see HELP RATES 351.
72 Updates in 2001. Please see HELP NEWS 351 for details.
File 371:French Patents 1961-2001/BOPI 200124
(c) 2001 INPI. All rts. reserv.
File 447:IMSWorld Patents International 2001/May
(c) 2001 IMSWorld Publ. Ltd.
File 652:US Patents Fulltext 1971-1979
(c) format only 2001 The Dialog Corp.
*File 652: Reassignment data current through 12/5/2000 recordings.
Due to processing problems, the SORT command is not working.
File 653:US Patents Fulltext 1980-1989
(c) format only 2001 The Dialog Corp.
*File 653: Reassignment data current through 12/5/2000 recordings.
Due to processing problems, the SORT command is not working.
File 654:US PAT.FULL. 1990-2001/Jun 19
(c) format only 2001 The Dialog Corp.
*File 654: Reassignment data current through 12/5/2000 recordings.

Selected file: USAPPS
US Patent Applications full text from the USPTO
Coverage : March 15, 2001 to present (2001-25/UP)
Phase 1 database release date : 2001/03/29 (YYYY/MM/DD)
For further information on this file, enter : INFO USAPPS
Last database update : 2001/06/21 (YYYY/MM/DD)

TITLES AND KWIC OF [illegible] AND FOREIGN PATENTS/PUBLICATIO CONTAINING THE KEYWORDS "FLOW?(5N)OIL? ? AND (THERMISTOR? OR HEAT? ?(10N)(SENS?*OR MEAS? OR DETECT))" IN THE TITLE, CLAIMS, OR ABSTRACT

9/AZ,TI,KWIC/1 (Item 1 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

013726651
Fluid mass flow rate estimation method in oil well, involves obtaining temperature profile of fluid along conduit and that of heat sink to derive mass flow using measured thermal transfer parameters

Fluid mass flow rate estimation method in oil well, involves obtaining temperature profile of fluid along conduit and that of heat sink to derive mass flow using measured thermal transfer parameters

Abstract (Basic):
... The temperature distribution profile of fluid passing through a conduit (20) in heat sink, is measured based on the optical data obtained from optical fiber which is in thermal contact with fluid. Mass flow rate is estimated based on measured temperature profile of fluid, temperature profile of heat sink that is kept at different temperature from the fluid and the computed thermal transfer...

9/AZ,TI,KWIC/2 (Item 2 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

013645318
Solenoid operated valve for controlling fluid flow, has thermistor which is serially connected to coil parts of solenoid valve and has preset resistance value

Solenoid operated valve for controlling fluid flow, has thermistor which is serially connected to coil parts of solenoid valve and has preset resistance value

Abstract (Basic):
... coil (3) is constituted by coil parts (3a,3b) which are connected in parallel. A thermistor is serially connected to one of the coil parts. The resistance of the thermistor rises to a preset value, only when a fixed time progresses after initiating supply of...
... For controlling pressure of flow of oil pressure fluid...

9/AZ,TI,KWIC/3 (Item 3 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

013363739
Oil combustion equipment has indirect heating type flow sensor and controller to send feedback based on sensor value

Abstract (Basic):
... has indirect heating type flow sensor (60) in middle of part. A controller compares the detected flow rate with already calculated flow rate corresponding to required heat combustion and performs feedback control of flow to fuel supply actuator (20).
... By providing flow sensor to oil supply path, oil supplied to burner is detected with accuracy. By using indirect heating type flow sensor, large disturbance to flow of oil is prevented. Oil flow required is reliably and correctly supply, so desirable

combustion is pe[redacted]rmed...

9/AZ,TI,KWIC/4 (Item 4 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

013305278
Monitoring oil lubrication in combustion engine of vehicle by detecting air bubbles in oil flow

Monitoring oil lubrication in combustion engine of vehicle by detecting air bubbles in oil flow

Abstract (Basic):
... forced feed lubrication system, connected to processing circuitry (9) for detecting gas bubbles in the oil flow . The sensor is placed in an oil intake line (3) in the flow direction preceding an oil pump (2) of the forced feed lubrication system. The sensor may be thermoelectric e.g. a resistance wire or thermistor .

9/AZ,TI,KWIC/5 (Item 5 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

013062198
Fuel flow control system for oil combustor, has temperature detecting element with thermoplate substrate and heat emitting element, after oil temperature sensor in vertical fuel feed path

Fuel flow control system for oil combustor, has temperature detecting element with thermoplate substrate and heat emitting element, after oil temperature sensor in vertical fuel feed path

...Abstract (Basic): NOVELTY - A temperature detecting element (5) consists of thermosensitive resistance film and heat emitting element laminated on thin plate substrate (5b). A thin plate oil temperature sensor (6...

...USE - For controlling fuel flow in oil combustor...

9/AZ,TI,KWIC/6 (Item 6 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

012959523
Lubricating oil flow control system of refrigerating cycle for collecting lubricating oil to compressor - uses lubrication controller to operate compressor at low speed rotation for predefined time when oil detector detects oil insufficiency in compressor

Lubricating oil flow control system of refrigerating cycle for collecting lubricating oil to compressor...

...Abstract (Basic): oil detector. DESCRIPTION OF DRAWING(S) - The drawing shows the refrigerating cycle equipped with an oil flow control system. (1) Compressor; (3) Indoor heat exchanger; (4) Valve; (5) Condenser; (8) Oil detector ; (9) Lubrication controller...

9/AZ,TI,KWIC/7 (Item 7 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

012831271
Vortex flowmeter for oil, chemical liquids - performs heat pulse based flow calculation or vortex based flow calculation, based on amplitude level of output vortex signal, accordingly

Vortex flowmeter for oil, chemical liquids...

...Abstract (Basic): is arranged on inclined surfaces (17b,17c) of vortex generator along its downstream side. The heat emitting element is energized to generate heat pulses, during flow measurement . The vortex signal output unit outputs vortex signal, based on the detection result of amount...

...USE - For detecting flow rate of oil , chemical liquids and foodstuffs in liquid form...

...Measurement accuracy even in micro flow region is enhanced. Number of parts is reduced as sensor for detecting heat pulse is eliminated. DESCRIPTION OF DRAWING(S) - The figure shows the side view of vortex...

9/AZ,TI,KWIC/8 (Item 8 from file: 351)

012765829
Method of partially cooking food

Abstract (Basic):
... zone by controlling the heat exchanger heat output. It also controls the rate of convective heat transfer to the food by sensing oil delivery pressure, oil flowrate , oil density, viscosity and turbulence. When convective heat transfer is controlled sprayer type, nozzle type, hydraulic...

9/AZ,TI,KWIC/9 (Item 9 from file: 351)

012088815
Oil flow sensor for two-cycle IC marine engine - has comparator which outputs flow indicator signal by comparing first and second temperature signals, based on which switching unit switches signaling unit

Oil flow sensor for two-cycle IC marine engine...

...Abstract (Basic): The sensor includes a heating element positioned within an oil line. A first heat sensor positioned at the downstream side of the heating element generates a first temperature signal. An...

...circuit generates an offset signal which is combined with the first temperature signal. A second heat sensor positioned at upstream side of the heating element, generates a second temperature signal...

...A comparator is provided, whose first input side is coupled to the first heat sensor and the offset circuit. The second input side of the comparator is coupled to the second heat sensor . The comparator outputs a flow indicator signal, by comparing the first and second temperature signals...

...ADVANTAGE - Improves reliability. Detects oil flowing in oil line

of IC engine, di[redacted]tly...

9/AZ,TI,KWIC/10 (Item 10 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

012006115
Oil-cooler apparatus for transmission - has thermo sensing valve which opens and closes by-pass path and course path of heat radiator so that oil temperature in oil pan mechanism might be detected and maintained at appropriate temperature

...Abstract (Basic): A thermo sensing valve (26) is provided in the upstream side of the heat radiator to selectively open and close the by-pass path and the course path (25...

...temperature even when atmospheric temperature is low. Improves durability of heat radiator since hot lubricating oil is prevented from suddenly flowing to heat radiator since by-pass path is opened to transmit heat of lubricating oil...

9/AZ,TI,KWIC/11 (Item 11 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011894454
Clear, heat-shrinkable film for labelling containers - has tubular sleeve of non foam polystyrene material with bonded and overlapped free ends, polystyrene being blend of crystal and block polystyrene

...Abstract (Basic): other such that the polystyrene comprises a blend of crystalline polystyrene, which contains no mineral oil and has a flow rate of 8-10 g/10 min (condition G) and a vicat softening temperature of...

...direction (TD) orientation and the sleeve will shrink about a container on the application of heat . The sleeve has a high clarity as measured by a haze value of less than 5...

9/AZ,TI,KWIC/12 (Item 12 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011799194
Cooking oil heating system for commercial deep-fat frying apparatus - has heat transfer liquid such as oil heated by gas burner remote from cooking oil, and passed into it by heat exchanger, and uses combination pivot and valve mechanism for controlling heat flow transfer

...Abstract (Basic): to the liq. to be heated. The temp. of the liq. to be heated is sensed . Additional heated heat transfer liq. is provided to displace the prior heated heat transfer liq. after it has...

...pivot joint (50) allows the heat exchanger loop to be lifted out of the cooking oil , and to halt the flow of heat transfer into the loop, but to permit continuous flow of the heat transfer...

9/AZ,TI,KWIC/13 (Item 13 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011505330

Engine operating method - involves adjusting temperature of lubricating fluid to constant level irrespective of engine load

...Abstract (Basic): a heat exchanger (4) and a regulating unit (2) which, in response to signals from oil temperature sensor (3), controls the flow of heat into the circuit from the engine coolant heat exchanger (7...

9/AZ,TI,KWIC/14 (Item 14 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011416732
Heat exchanger used with especially solid fuel heater - incorporates heat-exchange passages of adjustable length controlled by temperature sensor

... incorporates heat-exchange passages of adjustable length controlled by temperature sensor

...Abstract (Basic): for a further medium (3) fluid e.g. air, water, steam or natural or synthetic oil . The second fluid flows in counter-flow to the first...

9/AZ,TI,KWIC/15 (Item 15 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011412331
Air conditioner - has heat controller which controls heater, heating oil in compressor, based on coldness amount determined by coldness calculating device

...Abstract (Basic): 5), and an outdoor fan (4) while the indoor unit is consist of an indoor heat exchanger (7) and an indoor fan (8). An internal-pressure detector (21) determines internal pressure in a compressor (1) while an oil temperature sensor (10) determines...

...A coldness calculating device (22) computes the coldness amount in the mixing coolant flow path. A heater (11) heats oil in the compressor. A heater controller controls (23) the heater based on the coldness amount...

9/AZ,TI,KWIC/16 (Item 16 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

011175013
Cooling system for IC engine - includes regulating temp. of cooling in twin circuit cooling system by altering stream of force blown air in first circuit and altering oil flow rate in second circuit

... circuit cooling system by altering stream of force blown air in first circuit and altering oil flow rate in second circuit

...Abstract (Basic): The temp. of the oil is adjusted by altering the flow of oil passed by the water-oil heat exchanger, and air stream, force blown onto the radiator of the second circuit. The temp. of the cooling liquid in the second circuit is measured at the outlet of the heat exchanger an it is then adjusted by altering the flow rates of the cooling liquid...

9/AZ,TI,KWIC/17 (Item 17 from file: 351)
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011077156
Determining wellbore flow regime or activity of perforations in wellbore casing - by generating temp map of flowing oil water or gas from array of temp sensors at known spaced apart locations within bore cross section

... by generating temp map of flowing oil water or gas from array of temp sensors at known spaced apart locations within bore...

...Abstract (Equivalent): determining the thermal transient response at each sensor , thereby determining heat transfer properties of fluid in which each one of the temperature sensors is immersed...

9/AZ,TI,KWIC/18 (Item 18 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010906664
Lubricating oil supply to gear wheel transmission monitoring sensor - uses calorimetric measurement principle to distinguish between heat carried off from thermistor at maximal rate in air or at minimal rate in oil or oil mist

... uses calorimetric measurement principle to distinguish between heat carried off from thermistor at maximal rate in air or at minimal rate in oil or oil mist

...Abstract (Basic): measurement elements and micro-processor electronics (4) integrated into the housing. One measurement element (3) measures the temperature of the medium and the other measures the heat carried away...

...The sensor uses the calorimetric measurement principle to reliably distinguish between heat being carried off from a heated ceramic PTC thermistor (2) with maximal flow speed in air or with minimal flow speed in oil or oil mist. The micro-processor electronics may be programmable to output a given signal under specific...

9/AZ,TI,KWIC/19 (Item 19 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010661799
Fuel heating unit - has temp. detector with thermally sensitive element at fuel line outlet

...Abstract (Basic): outlet connection pipe (18) which also contains a perforated cylindrical slide valve (15). Another temp. detector is placed at the heat exchanger oil cavity outlet and its sensitive element is connected to the slide valve situated in the hollow manifold ...

...An element (11) turns the slide valve (12) covering the holder (9) perforation. The cold oil flows through pipe (13) over the holder (9) lower end and enters the heat exchanger oil cavity and then leaves through pipe (18). The sensing element (14) turns the slide valve (15) matching the slide valve and the manifold (17) perforations and part of the oil flows out...

9/AZ,TI,KWIC/20 (Item 20 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010548985
Row-type fuel injection pump for oil lubricating type diesel engine - has heater, in heat exchanger submerged in cooling water, that heats oil flowing through it from oil supply appts. to injection pump according to oil temp. as detected by heat sensor

... has heater, in heat exchanger submerged in cooling water, that heats oil flowing through it from oil supply appts. to injection pump according to oil temp. as detected by heat sensor

...Abstract (Basic): a cooling water (82). The cooling water is used to regulate the temp. of the flowing oil (81) before pumping it towards the contacting parts of the engine...

...A heating sensor (12) consisting of a heater and a controller for measuring the temp. of oil is installed in the heat exchanger. The sensor provides the means to monitor the change of temp. of oil and adjust this temp...

9/AZ,TI,KWIC/21 (Item 21 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010543766
Controlling pump to move oil from wellbore to holding tanks - using on/off controller receiving digitised output from two spaced apart thermistors in oil flow, which detect heat from constant power heater

... using on/off controller receiving digitised output from two spaced apart thermistors in oil flow, which detect heat from constant power heater

...Abstract (Basic): A controller has two tips placed in an oil flow and a heater in one of the tips which is connected to a constant power ...
...Abstract (Equivalent): comprises: a housing having a first tip and a second tip for placement in a flow of oil between the wellbore and the holding tank; device for generating a constant power; a heater...

...signal and for generating a control signal which is independent of ambient temp. of the oil flow ; and device for switching the pumping unit on or off, responsive to the control signal...

9/AZ,TI,KWIC/22 (Item 22 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010480751
Shut-off control system for oil/gas well for safeguard from terrorist attack - including explosion proof bunker housing actuator means for closing valves in the event of abnormal condition being detected by sensors, e.g. explosion or abnormal heat, etc.

... proof bunker housing actuator means for closing valves in the event of abnormal condition being detected by sensors, e.g. explosion or abnormal heat, etc.

...Abstract (Basic): valve means, actuates the valve means to open or closed conditions and permits or prevents flow of gas or oil through the casing. A normally inaccessible closure means, at least partially below ground level, is connected to the actuator means for selectively controlling its condition so that undesired flow of oil /gas can be stopped in the event of an abnormal alarm condition at the discharge...

9/AZ,TI,KWIC/23 (Item 23 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

010252291
Self-cleaning coil filter - has heat- sensitive transducer connected to throttle in dirt drain line and to engine lubrication or cooling system

... has heat- sensitive transducer connected to throttle in dirt drain line and to engine lubrication or cooling system

...Abstract (Basic): The filter has a heat -sensitive transducer (6) in the oil output line (5), and is connected to a variable throttle...

...the far left positions, leaving a min. cross section open in the drain line. The oil flow in this line enables the filter to clean efficiency, allowing for the low rate of...

9/AZ,TI,KWIC/24 (Item 24 from file: 351)
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010056353
Multiphase fluid flow measurement method - determining volumetric flow rate from power input to pump, pressures and temperatures of fluid mixture, specific heat and density of gas and liquid and polytropic compression exponent of gas

...Abstract (Basic): and calculating the liquid volumetric flow rate and gas volumetric flow rate based on the measured parameters, pump coefficients for friction horse power, fluid leakage and heat transfer, together with predetermined values of liquid and gas specific heat, density and polytropic compression...

...USE/ADVANTAGE - Oil production; measuring flow of oil and water mixture. Relies on thermodynamic relationships. Continuous, real time fluid flow measurement using uncomplicated...

9/AZ,TI,KWIC/25 (Item 25 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

009367848
Controlling oil temp. of injection moulding machines oil pressure appts. - by detecting temp. and varying amt. of cooling water accordingly

...Abstract (Basic): oil of variable pump, cooling water control valve to control cooling water flowing in the heat exchanger, and temp. sensor detecting a temp. of working oil in the oil tank. Temp. of working oil in the oil pressure appts. is controlled by detecting a temp. of working oil in the oil tank, outputting a flow rate command value to the control valve of variable pump, pressure command

value to the...

9/AZ,TI,KWIC/26 (Item 26 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

008929669
Monitoring arrangement for turbo compound engine system - uses temp. sensor responding to both radiated heat from coupling and lubricant temp. to control engine power output

... uses temp. sensor responding to both radiated heat from coupling and lubricant temp. to control engine power output

...Abstract (Basic): ADVANTAGE - Protects coupling from failure in event of oil flow reduction or disruption...

9/AZ,TI,KWIC/27 (Item 27 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

008505519
Compensation for thermal expansion in machine tool - by mounting position indicator on bar heated with lubricating oil

...Abstract (Basic): 11). This expansion bar (22) has a U-shaped passageway (23) in which the lubricating oil which flows from the cross-slide (12) is circulated. This feature ensures that the expansion bar heats up as rapidly as the cross-slide and so minimises measurement errors ...

9/AZ,TI,KWIC/28 (Item 28 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

008200160
Oil tank for two-cycle engine - obtd. from conductive material-contg. synthetic resin

...Abstract (Basic): oil tank through an electrical circuit. The electrical circuit has a switch for controlling current flow to the oil tank. The switch is a manually operated switch or a thermal sensitive switch automatically closing...

...heater is required. Heating the oil provides good heating characteristic. The use of the thermal sensitive switch automatically heats the oil tank when engine atmospheric temp. decreases down to a predetermined temp. The result...

9/AZ,TI,KWIC/29 (Item 29 from file: 351)
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008114391
Lube oil solvent dewaxing control system - effects growth of uniform wax crystals of moderate size for optimum filtering rate, and oil content

...Abstract (Basic): Lube oil solvent dewaxing control system comprises chilling the oil-solvent mixture first in heat exchanger-chillers (6,30,7,8,9) in a first sensible heat exchange zone in which the temp. of the waxy oil is reduced at a specified...
...Abstract (Equivalent): provided to a filter, which control system

comprises first flow control means for controlling the flow rate of the waxy oil to the series of chillers, second flow control means for controlling the flow rate of...

...plurality of temp. sensing means arranged in sequence for sensing the temp. of the waxy oil flowing through the series of chillers and providing a plurality of signals corresponding thereto, refrigerant temp...

...determining by comparison a sequence of adjacent temp. sensing means of the plurality of temp. sensing means at which a relatively isothermal heat transfer takes place thereby defining three sequential zones in the chilling of the waxy oil...

...Abstract (Equivalent): A control system for a lubricating oil dewaxing appts regulates oil flow rate to a series of at least three chillers (6) after mixing with wax solvent...

...refrigerant flow rate to each chiller, signals solvent flow rate (B) to each chiller, and senses temp (E) in chilling rate, isothermal heat transfer and filtering temp zones of each chiller. Temp signals are compared to define the...

9/AZ,TI,KWIC/30 (Item 30 from file: 351)
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008034857
Recovery of hydrocarbon(s) from depleted oil bearing formations - by continually flowing pressurised heated non-aq. gas through channel in heat exchange with reservoir boundary

...Abstract (Basic): aq. gas comprises (a) continually flowing a pressurised heated non-aq. gas along and in heat exchange relationship with a sensible boundary of the reservoir to impart sufficient heat and dissolve sufficient gas into oil-in-place which is in close proximity to the...

...of the reservoir to mobilise the oil-in-place by decreasing its viscosity; (b) effecting flow of the mobilised oil into one or more collection reservoirs; (c) producing the oil from the one or more...

9/AZ,TI,KWIC/31 (Item 31 from file: 351)
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007767477
Measuring appts. with temp. compensator for machine tool - has channel-like cavity in workpiece support carriage receiving heat-conveying medium pref. oil to serve as heat exchanger

...Abstract (Basic): and a reference scale. It is coupled to a temp. compensation unit consisting of a heat exchanger controlling the operating temp. of the measurement device...

...shaped hollow chamber (20) in a workpiece supporting carrier (4). A heat transfer medium, esp. oil , flows through the chamber, one of whose walls (21) is a mounting wall for measurement device...

...by taking advantage of the machine tool's design. Optional thermal coupling is achieved between heat exchanger and measurement device ...

9/AZ,TI,KWIC/32 (Item 32 from file: 351)
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007265382
Detecting annular flow in wells - involves measuring difference in temp. above and below heater sector

...Abstract (Basic): 7) to the hole wall. Once the heating routine has been established and with the heat still on, transducers (6) measure resistance above and below the heater. The transducer ohmic resistances change as a function of...

...USE/ADVANTAGE - Oil well investigations, annular flow detection. Accurate on-line method involves temperature comparison for flow and direction finding. Bul.4...

9/AZ,TI,KWIC/33 (Item 33 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

007117299
Detecting oil aerosol by heat from combustion catalyst - on which electrically charged droplets have been deposited

Detecting oil aerosol by heat from combustion catalyst...

...Abstract (Basic): g. 15-45 secs. is heated to a temp. capable of initiating catalytic combustion. The heat evolved by each combustion is measured and converted into an output signal, used for measurement or merely to indicate whether a...
...Abstract (Equivalent): A method of detecting oil aerosol in an air flow , the method comprising passing the air flow through a space between an electrode and an...

...c ausing electrical discharge between the electrode and the catalyst so as electrostatically to precipitate oil from the air flow on to the catalyst, terminating the discharge, stopping the air flow, heating the catalyst in...

...stagnant air, to a temperature at which catalytic combustion of the precipitated oil occurs, and sensing heat generation due to said catalytic combustion to produce an output indicative thereof.
...Abstract (Equivalent): Oil aerosol in an air flow , e.g. from an air compressor, is detected by passing the flow between an electrode

9/AZ,TI,KWIC/34 (Item 34 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

007080825
Automatic preheater for atomising oil burner nozzle - has oil passed through heated sintered body, inlet and outlet temp. sensed by thermostats and control heat applied accordingly

... has oil passed through heated sintered body, inlet and outlet temp. sensed by thermostats and control heat applied accordingly

...Abstract (Basic): The heater comprises a porous sintered body (14) through which oil flows from the inlet (2) to the atomising nozzle (1) and a control appts. using the thermostat (20) to sense the temp. of the incoming oil. Heat is provided by a coil (15) disposed around

the sintered body (14). Temperature adjustment is...

9/AZ,TI,KWIC/35 (Item 35 from file: 351)
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007079495
Electronic monitoring of oil flow in high speed centrifuge - has transistor protected thermistor to make component valves less critical

Electronic monitoring of oil flow in high speed centrifuge...

...has transistor protected thermistor to make component valves less critical

...Abstract (Basic): ADVANTAGE - Reliable and low cost system which has a transistor protected thermistor to make the component values less critical.

9/AZ,TI,KWIC/36 (Item 36 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

004680249
Vehicle-borne vaporising oil burner safety device - comprises collector vessel, recirculating line, mixing line and breather in line from tank to burner

...Abstract (Basic): ADVANTAGE - The heat -sensitive components in the system are protected against damage from heated oil flowing back by ensuring undirectional flow . (Dwg.No.1)

9/AZ,TI,KWIC/37 (Item 37 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

004523698
Regulator of temperature of IC engine - with heat- sensitive transducer acting on slide valve and bush to maintain constant oil flow to engine-fan coupling

... with heat- sensitive transducer acting on slide valve and bush to maintain constant oil flow to engine-fan coupling

...Abstract (Basic): Heat -sensitive transducer is coupled to a spring-loaded slide-valve between the inlet and outlet channels...

...When heated, heat -sensitive transducer (1) moves slide-valve (2). Bush (3) is acted upon by the pressure drop...

...ADVANTAGE - The effects of variable oil pressure on the flow of oil to the engine-fan coupling are minimised. Bul.25/7.7.85. (2pp Dwg.No

9/AZ,TI,KWIC/38 (Item 38 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

004495870
Unit for research into lubricating oil soot forming properties - has measuring tank with lubricator to pass measured oil to mixer and uses heat-insulated tube to pass air-oil mixt. onto carboniser

... has measuring tank with lubricator to pass measured oil to mixer and uses heat-insulated tube to pass air-oil mixt. onto carboniser

...Abstract (Basic): from measuring tank (3) through lubricator (4) in a strictly controlled quantity allowing the summed oil flow to be determined during the test period...

9/AZ,TI,KWIC/39 (Item 39 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

004395117
Measuring annulus flow rates in wells - by packing off part of casting and heating fluid in this maintaining constant temp. gradient to annulus

...Abstract (Basic): USE/ADVANTAGE - Used for annulus flow rate finding in oil and gas wells. The heated part of the string is no longer measured , and the method takes into account heat exchange right along the string, thus cancelling the effect of differential flow rates. (4pp Dwg...

9/AZ,TI,KWIC/40 (Item 40 from file: 351)
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004274344
Oil or water fluid flow detection - sampling amplified voltage from thermistor which is in contact with flow and comparing successive values

Oil or water fluid flow detection...

...sampling amplified voltage from thermistor which is in contact with flow and comparing successive values

...Abstract (Basic): The amplified voltage from a thermistor (Th) is sampled alternately by switches (11 and 12) controlled by a clock (10) and...
...Abstract (Equivalent): The amplified voltage from a thermistor (Th) is sampled alternately by switches (11 and 12) controlled by a clock (10) and...

9/AZ,TI,KWIC/41 (Item 41 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

004267143
Diesel engine cooling system with oil cooler - has radiator and by-pass line combined, with separate lines from pump to engine and cooler and radiator

...Abstract (Equivalent): the oil cooler; pumping means for a coolant disposed upstream of the engine and the oil cooler; a first coolant flow passage connecting the engine to a discharge side of said pumping menas; a second coolant...

...means assumes a first position of adjustment whereby substantially all of the coolant from the oil cooler flows through the heat exchanger; when the coolant has a second sensed temperature, teh control means assumes a second position of adjustment whereby substantially all of the coolant from the oil cooler flows through the bypass passage of the combination; and when the coolant has a third sensed...

...temperatures, the control means assumes a third position of adjustment whereby the coolant from the oil cooler flows simultaneously in predetermined proportions through the heat exchanger and the bypass passage of the combination...

9/AZ,TI,KWIC/42 (Item 42 from file: 351)
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004264609
Gas or liq. flow indicator for wells - has two similar cylinders at distance of 1.7-2.8 their dia. and contg. resistance coils

...Abstract (Basic): or oil wells comprises a housing (3) contg. horizontal Cu cylinder (1) with heating and heat sensitive elements (2) connected in series to a cable supplying current and used to lower the ...

...USE - For measurement of rates of flow of gas or oil streams contg. solid impurities. Bul.34/15.9.84. (4pp Dwg.No.1/3)

9/AZ,TI,KWIC/43 (Item 43 from file: 351)
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004199716
Liquid volumetric flow rate measurement - is temp.-compensated by temp. sensor and computer with RAM and ROM which stores volume coefficients

...Abstract (Basic): representing volumetric flow rate to a control unit. The liquid temp. is determined by a thermistor or platinum resistance thermometer (18) which passes signals to a switch (209) actuated by the ...

...USE/ADVANTAGE - For determining volumetric flow of crude oil or petroleum products into or out of an oil storage tank, oil refinery or fuel...
...Abstract (Equivalent): representing volumetric flow rate to a control unit. The liquid temp. is determined by a thermistor or platinum resistance thermometer (18) which passes signals to a switch (209) actuated by the...

...USE/ADVANTAGE - For determining volumetric flow of crude oil or petroleum products into or out of an oil storage tank, oil refinery or fuel...

9/AZ,TI,KWIC/44 (Item 44 from file: 351)
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004148624
Detecting change in fluid flow conditions in an oil well flowline - using ultrasensitive device which senses transient heat flux corresponding to oil flow

Detecting change in fluid flow conditions in an oil well flowline - ...

...using ultrasensitive device which senses transient heat flux corresponding to oil flow

...Abstract (Basic): Operation of an oil well pump is controlled using a transducer meter for sensing transient heat flow corresponding to abnormal change in oil flow within a flowline of a wellhead. The meter is lowered extensively of the flowline and generates an electrical signal based on the thermopile principle proportional to the sensed heat flux. A controller in electrical contact with the water is selectively responsive to the well pump when the abnormal change in oil flow occurs...

...USE/ADVANTAGE - Indicating unexpected stoppage of oil flow within a flowline or series of lines in an oil producing complex. The appts. is ultra sensitive and...

9/AZ,TI,KWIC/45 (Item 45 from file: 351)
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003871612
Clutch-brake unit with modular heat exchanger - has oil temperature sensors controlling cooling fluid through heat exchanger and stopping clutch-brake unit

... has oil temperature sensors controlling cooling fluid through heat exchanger and stopping clutch-brake unit

...Abstract (Basic): clutch/brake unit has a modular heat exchanger device. The apparatus includes a heat exchanger, oil flow control to the heat exchanger, low oil temp and high oil temp sensors associated with a control mechanism for starting and stopping the flow of cooling fluid through...

9/AZ,TI,KWIC/46 (Item 46 from file: 351)
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003787604
Free-flowing medium cooling system - has temperature sensor in medium outlet from heat-exchanger

... has temperature sensor in medium outlet from heat-exchanger

...Abstract (Basic): The cooling system is for a free-flowing medium such as oil , having a coolant circuit with expansion valve, heat -exchanger with oil inlet and outlet, compressor, condenser, temperature sensor and oil-temperature regulator...

...The sensor is in the oil outlet from the heat exchanger (WT), and the expansion valve (EV) is adjusted by an electric heater, the regulator...

9/AZ,TI,KWIC/47 (Item 47 from file: 351)
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003691176
Flowmeter for oil and gas wells - has turbulising bars upstream of measuring cylinders, to increase heat transfer and measuring range

Flowmeter for oil and gas wells...

...has turbulising bars upstream of measuring cylinders, to increase heat transfer and measuring range

...Abstract (Basic): wall temp. responding to flow conditions and flow rate, using the turbulising effect to maximise heat transfer and so increase sensitivity and measuring range. Bul.25/7.7.82. (3pp Dwg.No.1,2/2)

9/AZ,TI,KWIC/48 (Item 48 from file: 351)
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003174174
Separating paraffin from oil in refinery - using heat exchanger having by-pass control valve for coolant flow through exchanger

...Abstract (Basic): Dewaxing appts. for oil refinery applications employs a cooling system comprising a heat exchanger and includes a process variable sensor and a control valve connected between recovery oil bypass branching connected in bypass flow to the heat exchanger. The cooling process is controlled by sensing either the pressure upsteam of the heat exchanger and directly controlling the flow through a heat exchanger bypass, or sensing the temp. downstream of the heat exchanger and inversely controlling flow through the bypass. The flow control regulates the flow of...

9/AZ,TI,KWIC/49 (Item 49 from file: 351)
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003173594
Separating paraffin from oil in refineries - by controlling cooling process through sensing pressure or temp. at heat exchanger

... by controlling cooling process through sensing pressure or temp. at heat exchanger

...Abstract (Basic): is coupled to the control input of the valve. In operation, an increase in charge oil flow rate causes a decrease in recovery oil flow rate through the valve and a decrease in charge oil flow rate causes an increase in recovery oil flow rate through the valve...

...Used for treatment of oils contg. paraffin in refineries. The control valve controls the flow of oil to a prechiller for the refrigeration treatment of the charge oil. The cooling process is controlled by sensing either the pressure upstream of the heat exchanger and directly controlling flow through a heat exchanger by-pass, or sensing the temp. downstream of the heat exchanger and inversely controlling the flow through a heat exchanger by-pass.

9/AZ,TI,KWIC/50 (Item 50 from file: 351)
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003148912
Temp. stabilisation of temp.-sensitive instrument - enclosed in heat pipe using thermoelectric cooler and heat dissipation device

...Abstract (Basic): Temp. of a radiation detector is stabilised by housing the detector in a heat pipe and monitoring the temp. of the heat pipe, such that when this temp. exceeds a ref. value, heat is removed from the...

...Used for stabilising temp. of heat -sensitive equipment to enhance performance. E.g. detection of radiation from salt contained in crude oil flowing in a pipeline...

9/AZ,TI,KWIC/51 (Item 51 from file: 351)
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002493363
Oil contg. microcapsule prepn. - by coacervating oil droplets contg. polyisocyanate dispersed in colloidal material and cooling with stirring

...Abstract (Basic): below the gelling pt. of the colloidal material while regulating the aggregation of the encapsulated oil droplets by the flow or stirring to allow formation of multinuclear microcapsules with an ave. dia. of 3-20...

...capsules have improved water and solvent resistance. The microcapsules may be used in pressure- and heat -sensitive copying materials.

9/AZ,TI,KWIC/52 (Item 52 from file: 351)
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002352144
Supercritical pressure water heater fuel supply control - by using steam pressure drop measurement to produce correction signal

...Abstract (Basic): the fire boxes of coal dust burning hot water heaters during firing up, based on measuring the temp. of the medium before the area of maximum heat capacity and using the signal to regulate fuel supply. To improve the quality and reliability...

...During the initial firing up stage the fuel regulator controls fuel oil flow ; once the coal pulverisers and feeders are operating, the regulator begins continuous control of the...

9/AZ,TI,KWIC/53 (Item 53 from file: 351)
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002246272
Proportional regulator for flow rates of two reagents in oil refining - has two thermo batteries with thermocouples mounted on pipes in heat exchanger

Proportional regulator for flow rates of two reagents in oil refining ...

...Abstract (Basic): reagents is inversely proportional to the products of the mass flow rates with their specific heat . The increments are measured by the thermocouples and the regulator adjusts the actuator accordingly.

9/AZ,TI,KWIC/54 (Item 54 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

002179636
Gas and liquid flow rate-voltage converter - has magnetic valve control operating multivibrator acting on thermistor with signals processed through square-wave converter

... has magnetic valve control operating multivibrator acting on thermistor with signals processed through square-wave converter

...Abstract (Basic): Converter proposed for primary systems of automatic regulation for flowing liquids and gases in chemical, oil , metallurgical, food and other industries. Its advantage is increased accuracy upon variable flow temperatures within...

...However, part of main output feeds through magnetic control contacts (14) to low inertia thermistor (5) in chamber (2), through ballast resistor (7) to a.c. amplifier (8), square wave...

...Periodic setting of flow in chamber (2) varies resistance of thermistor (5) from value R'T, corresponding to zero speed (v' = 0), up to valve K...

...Thus, with volt drop on thermistor (5) constant voltage is obtained on square wave converter (9); (v = K1, DR2T = K2vx...

...Any instability due to sensitivity of thermistor (5) avoided, due to action of amplifiers (8, 11) and square wave converter (9), thus...

9/AZ,TI,KWIC/55 (Item 55 from file: 351)
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002070616
Sensitive gas and crude oil mixt. flow signaller - has one thermistor in inlet top gas zone and other in outlet fluid medium as sensing units

Sensitive gas and crude oil mixt. flow signaller...

...has one thermistor in inlet top gas zone and other in outlet fluid medium as sensing units

...Abstract (Basic): The indicator of gas-crude oil mixt. flow has high reliability and sensitivity...

...It contains two thermistors as sensing elements. One is fitted in the top gas zone of the inlet tube...

...The gas-crude oil mixt. from the producing well cools equally both thermistors by flowing past them, and thus keeps the measuring bridge in balance. Changes in the...

...in the top of the inlet tube results in a faster rate of heating its thermistor compared with the thermistor in fluid, and the bridge becomes unbalanced. The signal from the bridge diagonal provides the...

9/AZ,TI,KWIC/56 (Item 56 from file: 351)
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001634445
Radioactively labelled wear measuring rig - with double walled shielded vacuum flask enclosing radiation detector

...Abstract (Basic): A mobile measuring plant for radioactively labelled wear particles contained in oil includes a flow chamber in which the oil flows around a radiation detector. The flow chamber is designed as a double-walled horizontal cylinder...

...for natural background radiation shield and an additional shield against the radiation source. The radiation detector is accommodated inside a vacuum flask with heat sinks. The plant has a very light weight and a simple but very effective protection...

9/AZ,TI,KWIC/57 (Item 57 from file: 351)
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001482569
RC network to simulate heat transfer process compensation - has analogue simulation which operates on ambient temperature sensor output to provide compensation

...Abstract (Basic): mains transformer (11). The windings (14, 15, 16) of the transformer are located in an oil filled container and the current flowing generates heat transfer that is influenced by ambient conditions. The capacitors (CP, CS, Ct, CI...

...the windings, core and oil. The capacitor voltages are proportional to temperatures and current to heat energy. An ambient temperature sensor (63) operating over an amplifier (62) generates an input to the network. Output stages (28...

9/AZ,TI,KWIC/58 (Item 58 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

001278946
Determination of sediment deposit in oil pipes - using fixed heat flow through boiling liquid for accuracy

...Abstract (Basic): from source of boiling water (4). The heat from body (3) is transmitted to the oil flowing along pipe (1) at a rate dependent on the thickness of sediment layer (2). Measurement of the size of the heat flow is through a differential thermometer.

9/AZ,TI,KWIC/59 (Item 59 from file: 351)
DIALOG(R)File 351:(c) 2001 Derwent Info Ltd. All rts. reserv.

001259330
Liquid level sensing device - is thermistor with neg. coefficient of resistance wired to bridge cct. containing Zener diode

... is thermistor with neg. coefficient of resistance wired to bridge cct. containing Zener diode

...Abstract (Basic): case for replenishing oil used by an engine. A control circuit is connected to the thermistor and includes a four-armed bridge circuit with the thermistor as one arm and a Zener diode as another arm. A manually operated push button switch activates a silicon controlled rectifier. If the thermistor senses a lack of oil, the solenoid valve is opened and oil flows from the reserve tank into the crank case until the oil level is raised to...

9/AZ,TI,KWIC/60 (Item 60 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00994995

Refrigerating cycle apparatus
Vorrichtung mit einem Kaltekreislauf
Appareil a cycle frigorifique

...ABSTRACT an outdoor heat exchanger (5) by refrigerant pipes (1a, 8a, 8b), comprising:
a defrosting condition detector (10, 13) for detecting a frosting state of the outdoor heat exchanger in a heating operation;
a defrosting operation controller (11, 13) for carrying out a...

...CLAIMS an outdoor heat exchanger (5) by refrigerant pipes (1a, 8a, 8b), comprising:
a defrosting condition detector (10, 13) for detecting a frosting state of the outdoor heat exchanger during a heating operation;
a defrosting operation controller (11, 13) for carrying out a...

...detector.
3. The refrigerating cycle apparatus according to Claim 1, further comprising a refrigerant temperature sensor (10) provided on the outdoor heat exchanger; and the minimum operable frequency controller controls the minimum operable frequency based on a...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle (2-5) from the compressor, the oil circulates in the...

9/AZ,TI,KWIC/61 (Item 61 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00823803
SYSTEM FOR CONTROLLING THE TEMPERATURE OF A TEMPERATURE CONTROL FLUID IN AN INTERNAL COMBUSTION ENGINE
SYSTEM ZUM REGELN DER TEMPERATUR DER KUHLUNGSFLUSSIGKEIT IN EINER BRENNKRAFTMASCHINE
SYSTEME DE REGLAGE DE LA TEMPERATURE D'UN FLUIDE DE REGLAGE DE LA TEMPERATURE DANS UN MOTEUR A COMBUSTION INTERNE

...CLAIMS radiator, an intake manifold, an exhaust manifold for exhausting heated gases from engine, and an oil pan, the system including a flow of temperature control fluid operative for heating and cooling the internal combustion engine, the system...

...the heated gases in the exhaust manifold to the temperature control fluid in the exhaust heat assembly; characterized by:
a second temperature sensor for sensing a temperature indicative of the temperature of engine oil ;
a first flow control valve in fluid communication with the exhaust input tube; and
an engine computer for...
...the flow of temperature control fluid along the input exhaust tube and into the exhaust heat assembly when the sensed temperature indicative of the temperature of the engine oil is below a first predetermined value...

...the flow of temperature control fluid along the input exhaust tube and through the exhaust heat assembly when the sensed temperature of the temperature control fluid is above a second predetermined value.
2. A system...27. A system according to claim 8 further comprising a heat exchanger located within the oil pan for channeling a flow of temperature control fluid and wherein the water pump is adapted to

receive a flow of temperature control fluid from the heat exchanger in the oil pan when the flow control valve is in its closed state.

28. A system according to claim 8 wherein...of the second flow control valve based on signals from the first, second and third sensors .

79. A system according to claim 78 wherein the heat exchanger is mounted downstream of the throttle body.

80. A system according to claim 78...

...fourth sensor for sensing the temperature of the flow of intake air downstream of the heat exchanger, the fourth sensor providing a signal indicative of the temperature of the intake air to the engine computer...

...oil;
comparing the sensed temperature indicative of the engine oil temperature to a predetermined engine oil temperature value;
actuating the flow control valve so as to allow temperature control fluid to flow to an exhaust manifold...

...when the sensed temperature indicative of the engine oil temperature is below the predetermined engine oil temperature value; and
actuating the flow control valve so as to prevent the flow of temperature control fluid to the exhaust...the steps of:
detecting the temperature of the flow of intake air downstream of the heat exchanger;
comparing the detected temperature of the flow of intake air to a predetermined value for determining a desired...

9/AZ,TI,KWIC/62 (Item 62 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00791380
Positive temperature coefficient of resistance thermistor device
Thermistor mit positiven Temperaturkoeffizienten des Widerstandes
Thermistance du type a coefficient de temperature positive de la resistance

Positive temperature coefficient of resistance thermistor device
Thermistor mit positiven Temperaturkoeffizienten des Widerstandes

...ABSTRACT A3
A positive TCR thermistor device has excellent electrical contact between a heat generator (2) and heat radiating blocks (3,31,32) and high heat transfer efficiency therebetween. The positive TCR thermistor includes a heat generator (2) having a positive temperature coefficient of resistance and heat radiating...

...contact surface which is in contact with the heat radiating blocks (3,31,32) and oil (4) having flowability is disposed between the metallic paste electrode (25) of the heat generator (2) and the...

...CLAIMS A2
1. A positive TCR thermistor comprising:

a heat generator (2) having a positive temperature coefficient of resistance;

an electrode (25...

...a medium by receiving heat generated by said heat generator (2).
2. A positive TCR thermistor according to claim 1, wherein said

electrode (25) made of metallic paste.

3. A positive TCR thermistor according to claim 1, wherein said electrode (25) has a surface roughness of not more than 20 (mu)m.

4. A positive TCR thermistor according to claim 1, wherein at least one of a boiling point, volatiling temperature and...

...higher than a heat generating temperature of said heat generator (2).

5. A positive TCR thermistor according to claim 1, wherein said oil (4) includes at least one of engine oil...

...cylinder oil, machine oil, cutting oil, silicon oil and fluorine oil.

6. A positive TCR thermistor according to claim 1, wherein said oil (4) is provided only at said concave portions (200) of said electrode (25).

7. A positive TCR thermistor according to claim 1, wherein said heat generator (2) includes a PTC element.

8. A positive TCR thermistor comprising:

a heat generator (2) having a positive temperature coefficient of resistance;

electrodes (25) disposed...

...heating a medium by receiving heat from said heat generator (2).

9. A positive TCR thermistor according to claim 8, wherein said plate (301) is in direct physical contact with said one of said electrodes (25).

10. A positive TCR thermistor according to claim 8, wherein said heat generator (2) includes a PTC element.

11. A positive TCR thermistor according to claim 8, wherein said electrode (25) are provided at both sides of said...

...face both major surfaces opposing said heat generator (2).

12. A method of manufacturing a thermistor , said method comprising the steps of:

disposing a paste electrode (25) on a side of...

9/AZ,TI,KWIC/63 (Item 63 from file: 348)

00728719

Method and apparatus for compensating for thermal distortion for a machine tool

Verfahren und Gerat zum Ausgleichen thermischer Verformungen von Werkzeugmaschinen

Procede et appareil pour compenser des distorsions thermiques d'une machine-outil

...ABSTRACT A temperature change of a machine tool (10, 66, 86) which is influenced by a heat generating source is detected by a temperature sensor (S(sub 1) to S(sub 3), s(sub 1) to s(sub 3)). A...

...CLAIMS 66, 86) which is influenced by a heat source;

calculating a temperature change of the heat source by using the detected temperature change;

calculating a new temperature change having substantially the same time constant as a...

...66, 86) which is influenced by a heat source;

calculating a temperature change of the heat source by using the detected temperature change;

calculating a new temperature change having substantially the same time constant as a...

...main spindles is made uniform by controlling an amount and/or a temperature of coolant oil flowing through a jacket provided in a nose portion of each of said main spindles, or...a heat source;
new temperature calculating means (31a) for calculating a temperature change of said heat source by using the temperature change detected by said temperature detecting means, and then calculating a new temperature change having substantially the same time constant as...a heat source;
new temperature calculating means (31a) for calculating a temperature change of said heat source by using the temperature change detected by said temperature detecting means, and then calculating a new temperature change having substantially the same time constant as...main spindles is made uniform by controlling an amount and/or a temperature of coolant oil flowing through a jacket provided in a nose portion of each of said main spindles, or ...

9/AZ,TI,KWIC/64 (Item 64 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00713265
Online diagnostic system for rotating electrical apparatus
On-Line-Diagnosesystem fur rotierende elektrische Gerate
Systeme diagnostique en ligne pour appareil electrique rotatif

...CLAIMS 5, wherein said sensing means includes flow sensing means (98) for sensing a rate of oil flow and pressure sensing means (104) for sensing an oil pressure.
7. The system as recited...

...comparison means includes data correction means for correcting a value corresponding to the rate of oil flow as a function of a value corresponding to the oil temperature.
10. The system as...

...recited in Claims 10, 11, 12 or 13 wherein said rotating electrical apparatus has a heat exchanger (34) and said sensing means includes a water inlet temperature sensor (158) and a water outlet temperature sensor (160) for determining a temperature of the heat exchanger and/or an oil inlet temperature sensor (152) for the heat exchanger.
15. The system as recited in any one of Claims 10 to 14, wherein...

9/AZ,TI,KWIC/65 (Item 65 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00688860
METHOD OF AND APPARATUS FOR DISTILLATION UNDER REDUCED PRESSURE
METHODE UND VORRICHTUNG ZUR DESTILLATION UNTER UNTERDRUCK
PROCEDE ET APPAREIL DE DISTILLATION SOUS PRESSION REDUITE

...CLAIMS provided with a plurality of severally operable heaters and also provided with an oil temperature sensor for detecting the temperature of said heated heat -resistant oil and the operating conditions of said plurality of heaters are controlled in accordance with the temperature of said heat -resistant oil detected by said oil temperature sensor .

20. The apparatus according to claim 17, wherein a liquid level adjusting device is disposed...

...circulation rectifying plate erected inside said heating tank so as to encircle said still, an oil passing flow path disposed in the lower part of said oil circulation rectifying plate, and a heater...

...provided with a plurality of severally operable heaters and also provided with an oil temperature sensor for detecting the temperature of said heated heat -resistant oil and the operating conditions of said plurality of heaters are controlled in accordance with the temperature of said heat -resistant oil detected by said oil temperature sensor .

24. The apparatus according to claim 21, wherein a liquid level adjusting device is disposed...

9/AZ,TI,KWIC/66 (Item 66 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00581497
APPARATUS AND METHOD FOR RECLAIMING WASTE OIL.
VORRICHTUNG UND VERFAHREN ZUR WIEDERHERSTELLUNG VON GEBRAUCHTEN OELEN.
APPAREIL ET PROCEDE DE RECUPERATION D'HUILE USAGEE.

...CLAIMS An apparatus as claimed in any preceding claim, further comprising valve means to control the flow of waste oil from said oil feed means to said boiler.

5. An apparatus as claimed in claim 4, further comprising...23. An apparatus as claimed in any one of claims 19 - 22, including means for sensing the temperature of oil exiting the heat exchange conduit, connected to the control means, for deactivating the burner if that temperature exceeds...

...apparatus as claimed in any one of claims 19 - 23, including one of means for detecting excess flow through the heat exchange conduit and means for detecting excess pressure in the boiler, indicative of a surge of a volatile constituent leaving the...

9/AZ,TI,KWIC/67 (Item 67 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00563046
Air-conditioning apparatus
Klimagerat
Appareil de conditionnement d'air

...CLAIMS plural outdoor side units (1) to adjust the amount of the refrigerant and/or lubricating oil flowing among said plural outdoor side units (1), so that the excess or lack state of...

...which is provided between said outdoor side units (1) and through which refrigerant and lubricating oil can flow between said plural outdoor side units.

3. The air-conditioning apparatus as claimed in claim...

...51) are intercommunicated with each other, and an oil withdrawing passageway (21) through which said oil separator (12) and said refrigerant flowing passageway (51) are intercommunicated with each other.

4. The air-conditioning apparatus as claimed in...

...means and said opening and closing valve (55) to allow the refrigerant and/or lubricating oil to flow between said outdoor side unit (11))) suffering the excess or lack state of the refrigerant...

...said oil withdrawing passageway (21) has an opening and closing valve (23) for controlling the flow of the lubricating oil between said oil separator (12) and said refrigerant flowing passageway (51) through an opening and closing operation thereof, and the driving of the said...

...air-conditioning apparatus as claimed in claim 8, wherein said detection means comprises a first sensor (T3))) for detecting a condensation temperature of said outdoor heat exchanger and a second sensor (T4))) for detecting a temperature at the outlet of said outdoor heat exchanger, the excess or lack state of the refrigerant amount in said outdoor side unit...

9/AZ,TI,KWIC/68 (Item 68 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00348059
Liquid or fluid derivatives of natural fats and oils and process for their preparation and use.
Flussige bzw. fliessfahige Derivate von naturlichen Fetten und Olen, Verfahren zu ihrer Herstellung und Verwendung.
Derives liquides ou coulants de graisses naturelles ou d'huiles, procede de leur preparation et utilisation.

...CLAIMS or unsaturated fatty acids, and that the resulting reaction products are neutralized.
10. Liquid or flowable derivatives of natural fats and oils obtainable according to a process as defined in claims 1 to 9, characterized by a light fastness of at least 4, measured after 72 hours, and a heat -yellowing value of at least 3, measured after 24 hours, determined following the method of DIN 54004.
11. The use of the liquid or flowable derivatives of natural fats and oils according to claim 10 or of the product obtained according to the process of claims...

9/AZ,TI,KWIC/69 (Item 69 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00251844
Constant temperature fryer/cooker assembly.
Frittier- und Kochvorrichtung mit konstanter Temperatur.
Dispositif de cuisson par bain d'huile a temperature constante.

...ABSTRACT the assembly.
Further important structure includes a bypass type oil filtering structure, a static pipe oil flow structure (48) at each of the ends of the dispersing pipe (40), removable components for...

...CLAIMS the lower edge thereof and the bottom of said pan for increasing the effectiveness of oil flow through the pan as effected by the angled dispersing holes in said pipe.
6. A...

...sensitive to the cooking oil temperature includes at least one probe in the path of oil flow in the cooker assembly.

9. A fryer/cooker assembly as set forth in Claim ...

...forth in Claim 1, wherein said control means between the thermostat control means and the heat exchanger means includes an electric controller unit, electrical wiring, temperature sensing structure, and a temperature setting control.

12. A fryer/cooker assembly as set forth in...

...sensitive to the cooking oil temperature includes at least one probe in the path of oil flow in the cooker assembly.

13. A fryer/cooker assembly as set forth in Claim 1...

...A method of cooking food products of various types comprising the following steps:

effecting a flow of heated oil in a cooking pan;

passing return oil through a high efficiency heater/heat exchange unit...

...temperature of said oil; and

accurately controlling the heating of the oil by said heater/heat exchange unit in response to said sensing step.

16. A method as set forth in Claim 15, including the further step of ...

...forth in Claim 16, including the further step of filtering about one-third of the oil flow in each cycle thereof.

18. A method as set forth in Claim 17, including the...

...said cabinet, an oil reservoir, piping, and pump with motor connected together for effecting continuous flow of oil during a cooking operation, a heater/heat exchange unit in series with said pump and ...forth in Claim 21, wherein said pump comprises a contrifugal type pump for high capacity flow rates of cooking oil during operation thereof.

23. A cooking fryer as set forth in Claim 22, wherein said...

...forth in Claim 24, wherein said oil dispersing means incorporates means for effecting a small oil flow at normally static ends thereof.

26. A cooking fryer as set forth in Claim 25...

...said oil dispersing means includes a substantially rectangular set of pipes, said means for effecting oil flow through normally static ends of the dispersing pipe includes small conical tips thereon, and a baffle structure associated with the conical tips for diverting the small oil flow therefrom outwardly into the cooking pan.

27. A cooking fryer as set forth in Claim...

...for the cooking oil is provided with at least one temperature probe therewith for accurately sensing the temperature of the oil being inputted to the heater/heat exchange unit.

36. A cooking fryer as set forth in Claim 20, wherein said oil dispersing means includes piping which in turn incorporates means for effecting a small oil flow at each end of the normally static ends thereof.

37. A cooking fryer as set forth in Claim 36, wherein said means for effecting oil flow through the normally static ends of the dispersing pipe includes small conical tips thereon, and a baffle structure associated therewith for divering such small oil flow outwardly into the cooking pan.

38. A cooking fryer as set forth in Claim 20...

...comprises a fluid centrifugal type pump having an input and an output for high capacity flow rates of cooking oil during operation

thereof.
40. A cooking fryer as set forth in Claim 22, wherein said...

...two normally static ends, with means being provided therewith for permitting a small amount of oil flow through each of said ends.
45. A cooking fryer set forth in Claim 44, further including a baffle between the said normally static ends for diverting said small oil flow therefrom outwardly into the center of the cooking pan.

9/AZ,TI,KWIC/70 (Item 70 from file: 348)
DIALOG(R)File 348:(c) 2001 European Patent Office. All rts. reserv.

00246695
Auxiliary heater controller.
Zusatzheizungsregler.
Dispositif de reglage d'un chauffage auxiliaire.

...CLAIMS temperature, said thermostat control means (58) operating when said first fan power circuit means (58-66) is operative to sense ambient temperature and cause power to be provided to said fan means (16) only when...

...said engine (22) to form a second fluid circuit, said second fluid circuit including said heat exchanger means (12), heater means (18) and pump means (18), and controller means (26-94, 102-134) operative to control...to extend into contact with fluid contained within said supply vessel (120), said fluid to fluid heat exchanger means (118) being connected in said second fluid circuit to receive fluid which has...

...unit (130) including a fluid heat exchanger means (130) mounted to extend into contact with the oil within said engine (22), said fluid heat exchanger means (130) being connected in said first fluid circuit to receive fluid which has been heated by said heater means (18).
27...

...in said first fluid circuit.
33. The auxiliary heater controller of claim 32 wherein temperature sensing means (134) is mounted to sense the temperature of fluid heated by said heater means (18), said temperature sensing means (134) being connected to said controller means and operative when said sensed fluid temperature drops below a first temperature level to provide a first low temperature signal...

9/AZ,TI,KWIC/71 (Item 71 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 3221170
REFRIGERATING CYCLE APPARATUS

Abstract:
...of rotation, a four-way valve, an indoor heat exchanger, a pressure reducing device, outdoor heat exchanger, a defrosting condition detector for detecting a frosting state of the outdoor heat exchanger in a heating operation, a defrosting operation controller for carrying out a defrosting operation...
Exemplary Claim:
...a four-way valve, an indoor heat exchanger, a pressure reducing device and an outdoor heat exchanger by refrigerant pipes, comprising: a

defrosting condition detector for detecting a frosting state of the outdoor heat exchanger during a heating operation; a defrosting operation controller for carrying out a defrosting operation...

Non-exemplary Claims:

...3. The refrigerating cycle apparatus according to claim 1, further comprising a refrigerant temperature sensor provided on the outdoor heat exchanger; wherein the minimum operable frequency controller controls the minimum operable frequency based on a...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

...a housing of the compressor and lubricates sliding parts of the compressor, wherein when the oil is flowed out into a refrigerating cycle from the compressor, the oil circulates in the refrigerating cycle ...

9/AZ,TI,KWIC/72 (Item 72 from file: 340)

Dialog Acc No: 3058382

PROPYLENE RESIN COMPOSITION AND MOLDED ARTICLE THEREOF; POLYPROPYLENE HOMOPOLYMERS OR COPOLYMERS WITH PEROXIDES

Non-exemplary Claims:

...one plasticizer selected from the group consisting of mineral oil softeners, phthalate plasticizers and silicone oils , and having a melt flow rate (measured according to JIS K7210, at a temperature of 230* C. under a load...in advance if said components (C), (D) or both were not previously subjected to dymanic heat treatment, and having a melt flow rate (measured according to JIS K7210, at a temperature of 230* C. under a load of 2...

...in advance if said components (C), (D) or both were not previously subjected to dymanic heat treatment, and having a melt flow rate (measured according to JIS K7210, at a temperature of 230* C. under a load of 2...one plasticizer selected from the group consisting of mineral oil softeners, phthalate plasticizers and silicone oils , and having a melt flow rate adjusted to 50 to 300 g/10 minutes, and a

substrate layer ( ), or...

9/AZ,TI,KWIC/73 (Item 73 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 3056782
INDEPENDENT VALVE TRAIN LUBRICATION SYSTEM; FOR AN INTERNAL COMBUSTION ENGINE

Abstract:
...exclusively dedicated to providing lubrication of the valve train in an overhead cam engine. The flow rate of oil through the heat exchanger is controlled to maintain the temperature of oil disposed in a...
Exemplary Claim:
...conduit and with said oil pump; a temperature sensor arranged to sense the temperature of oil in said oil reservoir; a flow control valve in fluid communication with said heat exchanger; and an electronic control unit in...
Non-exemplary Claims:
...oil reservoir; a heat exchanger in fluid communication with said drain conduit and with said oil pump; a flow control valve in selective fluid communication with said heat exchanger; a temperature sensor arranged to sense the temperature of oil in said oil reservoir; and an electronic control unit in electrical...

9/AZ,TI,KWIC/74 (Item 74 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2954669
POSITIVE TCR THERMISTOR DEVICE HAVING SURFACE ROUGHNESS AND FILLING OIL FOR HIGH HEAT TRANSFER CHARACTERISTICS

POSITIVE TCR THERMISTOR DEVICE HAVING SURFACE ROUGHNESS AND FILLING OIL FOR HIGH HEAT TRANSFER CHARACTERISTICS

Abstract:
A positive TCR thermistor device has excellent electrical contact between a heat generator and heat radiating blocks and high heat transfer efficiency therebetween. The positive TCR thermistor includes a heat generator having a positive temperature coefficient of resistance and heat radiating blocks...

...electrode at a contact surface which is in contact with the heat radiating blocks and oil having flowability is disposed between the metallic paste electrode of the heat generator and the heat radiating...
Exemplary Claim:
D R A W I N G

1. A positive temperature coefficient of resistance thermistor comprising: a heat generator having a positive temperature coefficient of resistance; an electrode made of...
Non-exemplary Claims:
2. A positive temperature coefficient of resistance thermistor according to claim 1, wherein said oil includes at least one of engine oil, turbo ...

...3. A positive temperature coefficient of resistance thermistor according to claim 1, wherein said oil is provided only at said concave portions of...

...4. A positive temperature coefficient of resistance thermistor according to claim 1, wherein said heat generator includes a positive temperature coefficient element...

...5. A positive temperature coefficient of resistance thermistor comprising: a heat generator having a positive temperature coefficient of resistance; electrodes disposed at both...

...6. A positive temperature coefficient of resistance thermistor according to claim 5, wherein said plate is in direct physical contact with said one...

...7. A positive temperature coefficient of resistance thermistor according to claim 5, wherein said heat generator includes a PTC element ...

...8. A positive temperature coefficient of resistance thermistor according to claim 5, wherein said electrode, are provided at both sides of said heat...

...9. A method of manufacturing a thermistor , said method comprising the steps of: disposing a paste electrode on a side of a...

9/AZ,TI,KWIC/75 (Item 75 from file: 340)

Dialog Acc No: 2835198
METHOD AND APPARATUS FOR COMPENSATING FOR THERMAL DISTORTION FOR A MACHINE TOOL

Abstract:
A temperature change of a machine tool which is influenced by a heat generating source is detected by a temperature sensor . A temperature change having substantially the same time constant as a time constant of a ...

Non-exemplary Claims:
...machine structure which is influenced by a heat source; calculating a temperature change of the heat source by using the detected temperature change; calculating a new temperature change having substantially the same time constant as a...machine structure which is influenced by a heat source; calculating a temperature change of the heat source by using the detected temperature change; calculating a new temperature change having substantially the same time constant as a ...

...main spindles is made uniform by controlling an amount and/or a temperature of coolant oil flowing through a jacket provided in a nose portion of each of said main spindles, or...by a heat source; new temperature calculating means for calculating a temperature change of said heat source by using the temperature change detected by said temperature detecting means, and then calculating a new temperature change having substantially the same time constant as...

...by a heat source; new temperature calculating means for calculating a temperature change of said heat source by using the temperature change detected by said temperature detecting means, and then calculating a new temperature change having substantially the same time constant as... main spindles is made uniform by controlling an amount and/or a temperature of coolant oil flowing through a jacket provided in a nose portion of each of said main spindles, or...

9/AZ,TI,KWIC/76 (Item 76 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2833978
FOAM SHEET EXTRUSION DIE APPARATUS, AND SYSTEM WITH ADJUSTABLE CHOKE AREA

Non-exemplary Claims:
...for adjusting the temperature about the outer die lip by the individual adjustment of the flow of heat transfer oil through the passageways of each sector of the heat transfer oil ring...a thermoplastic flow communication with the inlet of the extruder of claim 12; b) temperature sensor means to determine the temperature of the heat transfer oil in the sector of the oil ring; c) heating-cooling means to heat...

...and the heat-cooler means; and e) control means to adjust the temperature of the heat -cooler means responsive to the sensor means, thereby adjusting the concentricity of the extruded plastic material...

9/AZ,TI,KWIC/77 (Item 77 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2832810
SYSTEM AND METHOD FOR ECONOMIC DISPATCHING OF ELECTRICAL POWER

Non-exemplary Claims:
2. The method according to claim 1, wherein said step of measuring real-time heat rate data includes: measuring a flow of at least one fuel source to each said plurality of power generating...

...The method according to claim 1, wherein said step of measuring operating parameters includes measuring oil flow into each said plurality of power generating units...poll each power generating unit and to receive said measured operating parameters, to transfer said measured operating parameters to said processor, to calculate real-time heat rates for each configuration of said plurality of power generating units, and to dispatch electrical...

9/AZ,TI,KWIC/78 (Item 78 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2799918
REFRIGERATION APPARATUS AND METHODS

Exemplary Claim:
...second source of motive power for causing the heat sink medium to flow through said heat sink passages in said oil cooler, (zd) a temperature sensor for sensing the temperature of said lubricating oil; and (p3 (ze) a variable speed drive...
Non-exemplary Claims:
...refrigeration system as in claim 1, said oil cooler including turbulators effective to cause turbulent flow in said lubricating oil at 250 psig operating pressure when said lubricating oil has a viscosity of 345 SSU...lubricating oil to ambient air, said oil cooler having a fan for causing air to flow through said oil cooler, thereby to cool said lubricating oil, said oil cooler further including a variable speed...

9/AZ,TI,KWIC/79 (Item 79 from file: 340)

DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2756690
SYSTEM FOR HEATING TEMPERATURE CONTROL FLUID USING THE ENGINE EXHAUST MANIFOLD

Exemplary Claim:
...the flow of temperature control fluid along the input exhaust tube and into the exhaust heat assembly when the sensed temperature of the engine oil is below a predetermined value and the engine computer actuating...

...the flow of temperature control fluid along the input exhaust tube and through the exhaust heat assembly when the sensed temperature of the temperature control fluid is above a predetermined value.
Non-exemplary Claims:
...on the exhaust manifold when the sensed engine oil temperature is below the predetermined engine oil temperature value; and actuating the flow valve so as to prevent the flow of temperature control fluid to the exhaust manifold...

9/AZ,TI,KWIC/80 (Item 80 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2725924
OIL DETERIORATION DETECTOR

Non-exemplary Claims:
...with claim 1, wherein at least at least one of said reference electrode and said sensitive electrode serves as a heat -dissipating radiator ...

...said sensitive electrode has a disk-shaped configuration having an oil passage hole for allowing oil to flow therethrough along an oil passage in the oil cooler...

...said sensitive electrode has a disk-shaped configuration having an oil passage hole for allowing oil to flow therethrough along an oil passage in the oil cooler...

...claim 15, wherein said metallic disk has a plurality of oil passage holes for allowing oil to flow along the oil passage in the oil cooler...

9/AZ,TI,KWIC/81 (Item 81 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2683230
ONLINE DIAGNOSTIC SYSTEM FOR ROTATING ELECTRICAL APPARATUS

Non-exemplary Claims:
...4, wherein said sensing means includes flow sensing means for directly sensing a rate of oil flow and pressure sensing means for sensing an oil pressure...

...comparison means includes data correction means for correcting a value corresponding to the rate of oil flow as a function of a value corresponding to the oil temperature...17. The system as recited in claim 10, wherein said rotating electrical apparatus has a heat exchanger and said sensing means includes a water inlet temperature

sensor and a water outlet temperature sensor for determining a temperature of the heat exchanger...

...system as recited in claim 10, wherein said rotating electrical power conversion apparatus has a heat exchanger and said sensing means is an oil inlet temperature sensor for the heat exchanger...

9/AZ,TI,KWIC/82 (Item 82 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2668179
TEMPERATURE CONTROLLED PRINTING PRESS

Exemplary Claim:
...the lubricating oil to the gear train for lubrication; a heat exchanger for cooling the oil ; a coolant flowing through selected ones of said plurality of rollers to cool the rollers; a temperature sensor...
Non-exemplary Claims:
...flow side; a coolant source supplying a cooled fluid to the second side of the heat exchanger; a temperature sensor on the press; a control to control heat transfer from the lubricating oil flowing through the first flow side of the heat exchanger to the coolant fluid flowing through the second side of...

...the plurality of rollers for heating the plurality of rollers; a control analyzing the temperature sensed by the temperature sensor and permitting a first rate of heat transfer to occur between the coolant fluid or the heated fluid and the press for...

9/AZ,TI,KWIC/83 (Item 83 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2611876
PROCESSES OF CONTINUOUSLY MAKING HARD COMPOSITES OF COKE AND CARBON-REDUCIBLE OXIDES FOR SMELTING TO IRON, FERROALLOYS AND SILICON; DRYING, PYROLYZING, CARBONIZING, COOLING, SELF-REDUCTION OF OXIDES OF ORES AND CARBON COMPOSITE TO FORM END METALS OR INTERMEDIATE FOR STAINLESS STEEL, CARBON STEEL ETC

Non-exemplary Claims:
...hot composites in the first section, whereupon the hot reducing gas is sent to the heat exchanger to utilize its sensible heat .
...to the process of claim 1 into the open hearth; heating them by injecting fuel oil into the flow of hot air coming from the checkers; combusting the carbon monoxide developed in the charge...

9/AZ,TI,KWIC/84 (Item 84 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2588236
MULTIPHASE FLUID FLOW MEASUREMENT

Abstract:
Multiphase fluid flow , such as a mixture of oil , water and gas, is measured by a system which includes one or two densitometers for...

...measured on the upstream and/or downstream sides of the flow restriction, pump, expander or heat exchanger and the measured values of density, pressure and temperature are used to obtain the flow rates of

the...
Non-exemplary Claims:
...the multiphase fluid flow comprising at least one of a flow restriction, pump, expander and heat exchanger; pressure and temperature sensor means operably connected to said flowline for measuring the multiphase fluid pressures and temperatures upstream...determining the fractions of water, oil and gas in a multiphase fluid mixture comprising said oil , water and gas flowing through a flowline, said flowline including means comprising at least one of a flow restriction, pump, expander and heat exchanger, pressure and temperature sensors located in said flowline upstream and downstream of said means and densitometer means disposed at...

...fraction of water, oil and gas in said multiphase fluid mixtures; and (e) determining the oil , water and gas flow rates based on the measured densities, pressures and temperatures and the factors determined in steps...

...12. The method set forth in claim 11 including the step of: determining the oil flow rate based on the oil formation volume factor at the temperature and pressure conditions upstream and downstream of said means...
...the step of: determining the total gas flow rate based on the gas densities, the oil volumetric flow rate, the water volumetric flow rate and the solution gas/oil ratio, the solution gas/water ratio, the oil formation volume factor and the water formation...

9/AZ,TI,KWIC/85 (Item 85 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2578171
LIQUID OR FLOWABLE DERIVATIVES OF NATURAL FATS AND OILS A PROCESS FOR THEIR PRODUCTION AND THEIR USE; CATALYTICALLY OXYALKYLATED FATS OR OILS FOR FAT-LIQUORING LEATHERS AFTER TANNING

LIQUID OR FLOWABLE DERIVATIVES OF NATURAL FATS AND OILS A PROCESS FOR THEIR PRODUCTION AND THEIR USE...

Abstract:
The present invention relates to derivatives of natural fats and oils that are liquid or flowable , respectively, and to a process for the production of said derivatives, in which oxalkylation is...
Exemplary Claim:
1. In the production of derivatives of natural fats and oils that are liquid or flowable , wherein the fat or oil starting material is oxyalkylated at elevated temperatures in the presence of alkaline catalysts with at...
Non-exemplary Claims:
...13. A liquid or flowable derivative of natural fats and oils obtained according to the process of claim 1...

...14. A liquid or flowable derivative of natural fats and oils , obtained according to the process of claim 1 having a light fastness of at least 4, measured after 72 hours, and a heat -yellowing value of at least 3, measured after 24 hours, according to DIN 54004...

9/AZ,TI,KWIC/86 (Item 86 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2544396

AIR-CONDITIONING APPARATUS

Exemplary Claim:
...said plural outdoor side units to adjust the amount of the refrigerant and/or lubricating oil flowing among said plural outdoor side units, so that the excess or lack state of the...
Non-exemplary Claims:
...passageway which is provided between said outdoor side units and through which refrigerant and lubricating oil flow between said plural outdoor side units...

...flowing passageway are intercommunicated with each other, and an oil withdrawing passageway through which said oil separator and said refrigerant flowing passageway are intercommunicated with each other ...

...closing means and said opening and closing valve to allow the refrigerant and/or lubricating oil to flow between said outdoor side unit suffering the excess or lack state of the refrigerant amount...

...3, wherein said oil withdrawing passageway has an opening and closing valve for controlling the flow of the lubricating oil between said oil separator and said refrigerant flowing passageway through an opening and closing operation thereof, and the driving of the said opening...

...air-conditioning apparatus as claimed in claim 8, wherein said detection means comprises a first sensor for detecting a condensation temperature of said outdoor heat exchanger and a second sensor for detecting a temperature at the outlet of said outdoor heat exchanger, the excess or ...heat between the refrigerant and outside air, and an oil withdrawing passageway through which said oil separator and said refrigerant flowing passageway are in fluid communication with each other.

9/AZ,TI,KWIC/87 (Item 87 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2444877
APPARATUS FOR RECLAIMING USEFUL OIL PRODUCTS FROM WASTE OIL; VAPORIZATION, CONDENSATION, COLLECTING

Non-exemplary Claims:
...by connection pipes, and baffles are provided in the connection pipes to substantially reduce convective flow of waste oil and heat transfer between the service tank, float tank and evaporation chamber... evaporation chamber by connection pipes, and baffles within the connection pipes, to substantially reduce convection flow of waste oil .
...

...connected to the outlet of the evaporation chamber and having an outlet for condensed, recovered oil ; flow sensing means mounted on the condensation unit, for sensing flow therethrough and connected in the... of the evaporation chamber; fans mounted on the condensation unit for moving air over the heat transfer surface; a first temperature sensing means mounted on the condensation unit for detecting the temperature therein; and a fan control...

9/AZ,TI,KWIC/88 (Item 88 from file: 340)

DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2377299
REFRIGERANT RECYCLING APPARATUS, METHOD AND SYSTEM

Non-exemplary Claims:
...refrigerant recycling apparatus as defined in claim 1, wherein the expansion valve comprises a temperature sensing expansion valve in communication with said primary heat exchanger, wherein the pressure reduction is regulated by the temperature of the heat exchanger as sensed by said temperature sensing expansion valve...flowing the refrigerant through the compressor-pump; h) further purifying the now pressurized refrigerant by flowing the refrigerant through the second oil separator device, said second oil separator

9/AZ,TI,KWIC/89 (Item 89 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2355942
UNLOADING STRUCTURE FOR COMPRESSOR OF REFRIGERATION SYSTEM

Non-exemplary Claims:
...to operate in a flooded condition and thus cause a mixture of liquid refrigerant and oil to flow into said third conduit means from said shell evaporator, said heating means causing vaporization of...

...of said fluid passing conduit, and a thermocouple in said central tubular portion and in heat conducting relationship therewith to thereby cause said thermocouple to sense the temperature of said fluid in said fluid passing conduit when relatively high flows of...

9/AZ,TI,KWIC/90 (Item 90 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2340854
COMPRESSION COOLING PLANT PROVIDED WITH AN OIL SEPARATOR

Non-exemplary Claims:
...portion of the heat exchanger container through the downpipe so that the liquid mixture of oil and refrigerant flows from the oil sump through the secondary heat exchanger to the first vessel portion through the downpipe, wherein...the oil separator includes a relay, a differential thermostat, a magnetic valve having a first detector spaced inside the heat exchanger vessel at a predetermined level, and a second detector mounted in the primary pipe between the refrigerant receiver and the primary heat exchanger, wherein...18. A system according to claim 16, wherein the second part of the heat exchanger vessel has a differential thermostat including a first detector inside the second part of the heat exchanger vessel and a second detector in the primary pipe for controlling the air discharge valve in the air discharge pipe...

9/AZ,TI,KWIC/91 (Item 91 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2305643
REFRIGERANT RECOVERY AND RECYCLE SYSTEM WITH FLEXIBLE STORAGE BAG

Abstract:

...refrigerant is vaporized within the phase separation means (5) by heat from the surrounding environment. Oil free refrigerant vapor flows through a selective adsorption column (8), which removes gaseous contaminants and water vapor, into a...
Non-exemplary Claims:
...a housing containing two flow cells each fitted with one of a matched pair of thermistors located in the flow stream. Each cell is fitted with an identical orifice. The outlet...

...15. The system of claim 14 wherein said matched thermistors are arranged in a wheatstone bridge...

9/AZ,TI,KWIC/92 (Item 92 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2303992
LUBRICATING APPARATUS FOR INTERNAL COMBUSTION ENGINE

Abstract:
A lubricating apparatus for an internal-combustion engine comprises a detector for detecting whether the engine runs or not, a heat storage reservoir connected to lubricating oil outflow and inflow ports of the engine by a...

...the hydraulic pump in order to maintain a temperature of the oil stored in the heat storage reservoir when the detector detects a stop of the engine and for producing the control signal to actuate the hydraulic...
Exemplary Claim:
...N G

1. A lubricating apparatus for an internal-combustion engine, comprising: detection means for detecting whether or not said engine is on; a heat storage reservoir for storing lubricating oil and maintaining its temperature, said lubricating oil passing through...

...hydraulic pump in order to maintain a temperature of said lubricating oil stored in said heat storage reservoir, based upon said detection means detecting that said engine has stopped, and for producing said control signal to cause said hydraulic...

...heat storage reservoir, to said portions of said engine; cut-off means for controlling a flow of said lubricating oil into said heat storage reservoir according to a second control signal, said cut-off means...
Non-exemplary Claims:
...6. A lubricating apparatus for an internal-combustion engine, comprising: detection means for detecting whether or not said engine is on; a heat storage reservoir for storing lubricating oil and maintaining its temperature, said lubricating oil passing through...

...off valve, provided between said outflow port and said heat storage reservoir, for controlling a flow of said lubricating oil into said heat storage reservoir according to a control signal; and control means for producing...

9/AZ,TI,KWIC/93 (Item 93 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2292228
DEVICE AND METHOD FOR COMBUSTION OF WASTE OIL

Abstract:
...gun for extending through the injection orifice for providing mechanical cleaning thereof and for regulating oil flow therethrough. The present invention includes a control system for regulating the operation thereof. In particular...
Exemplary Claim:
...circulatory conduit and forming a portion of the closed loop circulatory system so that the oil can flow to and subsequently away from the gun as it circulates through the circulatory system, and...
Non-exemplary Claims:
...defined in claim 8, and the nozzle assembly including atomizing air channel means and combustion oil channel means for directing the flow of pressurized air and combustion oil there through respectively in a manner that prevents the mixing of the combustion oil and...

...1, and further including a control system, the control system including electrical connections to a heat sensing means for sensing the temperature of the oil in the circulatory system, and the control means connected to...circulating oil channel of the atomizing gun to a predetermined optimal oil combustion temperature as detected by the heat sensing means so that the diverting valve means can not be operated to provide oil to...

...air control valve means connected to the pressurized air conduit for providing a substantially simultaneous flow of combustion oil and atomizing air towards the oil injection orifice of the nozzle assembly for injection of...

...has ceased for providing cooling of the atomizing gun and the nozzle assembly by the flow of oil through the circulatory channel of the atomizing gun...
...of the oil, and a control system, the control system including electrical connections to a heat sensing means of the circulatory system, the pumping means and the heater of the circulatory system...oil channel of the gun body portion to a predetermined optimal oil combustion temperature as detected by the heat sensing means so that the diverting valve means can not be operated to provide oil to...

...air control valve means connected to the pressurized air conduit for providing a substantially simultaneous flow of combustion oil and atomized air to and out of the nozzle assembly and into the combustion chamber...

...ceased for providing cooling of the gun body portion and the nozzle assembly by the flow of oil through the circulatory channel of the gun body portion, and having mechanical cleaning means including...

...defined in claim 16, and the nozzle assembly including atomizing air channel means and combustion oil channel means for directing the flow of pressurized air and combustion oil there through respectively in a manner that prevents the mixing of the combustion oil and...

...filter located at a point on the circulatory system in a direction downstream of the flow of oil with respect to the heater...
circulatory conduit and forming a portion of the closed loop circulatory system so that the oil can flow to and subsequently away from the gun as it circulates through the circulatory system, and...

...25, and further including a control system, the control system including electrical connections to a heat sensing means for sensing the temperature of the oil in the circulatory system, and the control means

connected to...

...channel of the atomizing gun body portion to a predetermined optimal oil combustion temperature as detected by the heat sensing means so that the diverting valve means can not be operated to provide oil to... air control valve means connected to the pressurized air conduit for providing a substantially simultaneous flow of combustion oil and atomizing air towards the oil injection orifice of the nozzle assembly for injection of...

...has ceased for providing cooling of the atomizing gun and the nozzle assembly by the flow of oil through the circulatory channel of the atomizing gun...
...defined in claim 25, and the nozzle assembly including atomizing air channel means and combustion oil channel means for directing the flow of pressurized air and combustion oil there through respectively in a manner that prevents the mixing of the combustion oil and the needle end. channel means for directing the flow of pressurized air and combustion oil there through respectively in a manner that prevents the mixing of the combustion oil and...

9/AZ,TI,KWIC/94 (Item 94 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2151075
APPARATUS AND METHOD FOR APPLYING HEAT- SENSITIVE ADHESIVE TAPE TO A WEB MOVING AT HIGH SPEED

APPARATUS AND METHOD FOR APPLYING HEAT- SENSITIVE ADHESIVE TAPE TO A WEB MOVING AT HIGH SPEED

Abstract:
Apparatus and method for applying heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material to a web moving at high speed, such as a web of water...

...and a heating mechanism for heating the tape to an elevated temperature at which the heat -sensitive adhesive is tacky and for maintaining the tape at the elevated temperature until it is...
Exemplary Claim:
D R A W I N G

17. A method of applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...the tape along the tape-feed wheel to a tape-feed temperature at which the heat -sensitive adhesive layer is tacky or substantially softened; providing suction through a portion of the peripheral...

...tape-applying wheel to heat the tape substantially to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape substantially at the elevated temperature until...
Non-exemplary Claims:
1. Apparatus for applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...tape-feed wheel to heat the tape to a tape-feed temperature at which the heat -sensitive adhesive layer is tacky or substantially softened; a tape-applying wheel in rolling engagement with...

...tape thereon; heating means for heating the circumferential surface of the tape-applying wheel to heat the tape to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape at the elevated temperature until it...

...tape-applying wheel includes walls in the tape-applying wheel forming a passageway for heated oil to flow through to heat the tape-applying wheel to the elevated temperature at which the heat -sensitive adhesive is tacky, the passageway spiraling substantially longitudinally substantially through the tape-applying wheel generally...9. Apparatus for applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...applying wheel; heating means for heating the circumferential surface of the tape-applying wheel to heat the tape to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape at the elevated temperature unit it...that the tape rides along the tape-feed wheel and tape-applying wheel with the heat -sensitive adhesive layer facing the tape-feed wheel and facing away from the tape-applying wheel...directions that the tape rides along the tape-feed and tape-applying wheels with the heat -sensitive adhesive layer facing away from the tape-feed and tape-applying wheels...

...wherein the heating means for heating the tape-applying wheel is adapted for heating the heat -sensitive adhesive layer of the tape to such an elevated temperature that the tape temporarily or...

...to the web, and post-heating means for heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature but ...

...wherein the heating means for heating the tape-applying wheel is adapted for heating the heat -sensitive adhesive layer of the tape to such an elevated temperature that the tape temporarily or...

...to the web, and post-heating means for heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature but ...

...tape is able to ride along the tape-feed and tape-applying wheels with the heat -sensitive adhesive layer facing away from the tape-feed and tape-applying wheels; supplying the tape to the tape-feed wheel with the heat sensitive -adhesive layer facing away from the tape-feed wheel; and feeding the tape to the tape-applying wheel from the tape-feed wheel with the heat -sensitive adhesive layer facing away from the tape-applying wheel...peripheral surface of the post-heat wheel; and heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature at which the heat -sensitive material is generally tacky but below the melting temperature of the web to form a...

...peripheral surface of the post-heat wheel; and heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature at which the heat -sensitive material is generally tacky

but below the melting temperature of the web to form a...

9/AZ,TI,KWIC/95 (Item 95 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2142566
CONTROL SYSTEMS FOR INJECTION MOLDING MACHINES

Non-exemplary Claims:
...both an output signal of said resin pressure comparator and an output signal of said oil pressure comparator to a flow control valve connected between said screw rotating means and a source of constant pressure oil...

...6. The control system according to claim 1 further comprising circuit means for preventing heat decomposition of said resin, said circuit means including a pressure detector (58) for detecting a pressure of oil used to actuate said screw rotating means, a...

9/AZ,TI,KWIC/96 (Item 96 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2028673
APPARATUS AND METHOD FOR APPLYING HEAT- SENSITIVE ADHESIVE TAPE TO A WEB MOVING AT HIGH SPEED; FEEDING ALONG TAPE FEED WHEEL; PREHEATING; APPLYING SUCTION

APPARATUS AND METHOD FOR APPLYING HEAT- SENSITIVE ADHESIVE TAPE TO A WEB MOVING AT HIGH SPEED...
Exemplary Claim:
Withdrawn -0240***DELETE
17. A method of applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...the tape along the tape-feed wheel to a tape-feed temperature at which the heat -sensitive adhesive layer is tacky or substantially softened; providing suction through a portion of the peripheral...

...tape-applying wheel to heat the tape substantially to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape substantially at the elevated temperature until...
Non-exemplary Claims:
1. Apparatus for applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...tape-feed wheel to heat the tape to a tape-feed temperature at which the heat -sensitive adhesive layer is tacky or substantially softened; a tape-applying wheel in rolling engagement with...

...tape thereon; heating means for heating the circumferential surface of the tape-applying wheel to heat the tape to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape at the elevated temperature until it...

...tape-applying wheel includes walls in the tape-applying wheel forming a

passageway for heated oil to flow through to heat the tape-applying wheel to the elevated temperature at which the heat -sensitive adhesive is tacky, the passageway spiraling substantially longitudinally substantially through the tape-applying wheel generally...9. Apparatus for applying pieces of heat -sensitive adhesive tape, such as frontal diaper tape, of the type having a layer of heat sensitive adhesive material that is generally tacky at an elevated temperature substantially greater than room temperature...

...tape-feed wheel to heat the tape to a tape-feed temperature at which the heat -sensitive adhesive layer is tacky or substantially softened; a tape-applying wheel in rolling engagement with...

...applying wheel; heating means for heating the circumferential surface of the tape-applying wheel to heat the tape to the elevated temperature at which the heat -sensitive adhesive is generally tacky and for maintaining the tape at the elevated temperature until it...that the tape rides along the tape-feed wheel and tape-applying wheel with the heat -sensitive adhesive layer facing the tape-feed wheel and facing away from the tape-applying wheel...directions that the tape rides along the tape-feed and tape-applying wheels with the heat -sensitive adhesive layer facing away from the tape-feed and tape-applying wheels ...

...wherein the heating means for heating the tape-applying wheel is adapted for heating the heat -sensitive adhesive layer of the tape to such an elevated temperature that the tape temporarily or...
...to the web, and post-heating means for heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature but ...

...wherein the heating means for heating the tape-applying wheel is adapted for heating the heat -sensitive adhesive layer of the tape to such an elevated temperature that the tape temporarily or...

...to the web, and post-heating means for heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature but ...

...tape is able to ride along the tape-feed and tape-applying wheels with the heat -sensitive adhesive layer facing away from the tape-feed and tape-applying wheels; supplying the tape to the tape-feed wheel with the heat sensitive -adhesive layer facing away from the tape-feed wheel; and feeding the tape to the tape-applying wheel from the tape-feed wheel with the heat -sensitive adhesive layer facing away from the tape-applying wheel...peripheral surface of the post-heat wheel; and heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature at which the heat -sensitive material is generally tacky but below the melting temperature of the web to form a...

...peripheral surface of the post-heat wheel; and heating the peripheral surface of the post-heat wheel to heat the heat -sensitive adhesive layer of the pieces of tape to a temperature above the elevated temperature at which the heat -sensitive material is generally tacky but below the melting temperature of the web to form a...

9/AZ,TI,KWIC/97 (Item 97 from file: 340)

DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 2007777
GAS-IN-OIL MONITORING APPARATUS AND METHOD; SEPARATION OF GASES; MEASUREMENT CHANGE IN ELECTROCONDUCTIVITY

Exemplary Claim:
...said sensing means are sintered metal oxide semiconductors with adsorbed oxygen; heating means which provide heat or voltage to said sensing means; said heating means provides a first heating voltage to said first sensing means to heat said second sensing means to a temperature which renders said first sensing means sensitive to the first of said predetermined gases; and a second heating voltage to said second sensing means to heat said second sensing means to a temperature which renders said second sensing means sensitive to the second of...
Non-exemplary Claims:
...for separating said predetermined gases from said oil comprises a first chamber through which said oil flows ; a diffusion membrane which defines a portion of said first chamber; said diffusion membrane being ...

9/AZ,TI,KWIC/98 (Item 98 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1925208
SYSTEM FOR MEASURING MULTIPHASE FLUID FLOW

Abstract:
...by interposing a heat exchanger in the flowstream or by reinjecting into the flowstream a measured amount of heat exchange fluid such as separated water or crude oil. The components of the liquid portion of the flowstream may be analyzed by passing a liquid sample through a heat exchanger to measure the heat loss or increase of the sample together with mass flow and volumetric flowmeters or by...
Non-exemplary Claims:
...a multiphase fluid flowstream such as being produced from a subterranean hydrocarbon formation, said fluid flowstream comprising primarily crude oil , water and gas, said system including: conduit means for receiving a main fluid flowstream from...

...said main flowstream and for conducting said main flowstream in heat exchange relationship with a heat exchange fluid of known flow/rate; and temperature sensing means for sensing the temperature differential of said main flowstream through said heat exchanger means and the temperature differential of said heat exchange fluid as a result of...10 wherein: said second heat exchanger means includes means for adding a predetermined quantity of heat to said sample flowstream at a predetermined rate for measuring the volumetric fraction of oil in said liquid mixture based at least in part on...

...forth in claim 10, including: means for conducting a known flow rate of a known heat exchange fluid to said second heat exchanger means and temperature sensing means for measuring the temperature change of said sample flowstream and said heat exchange fluid...

...liquid comprising one of the liquids of said fluid flowstream, and means for injecting a measured quantity of said heat exchange liquid into said main flowstream...

...a multiphase fluid flowstream such as being produced from a subterranean hydrocarbon formation, said fluid flowstream comprising primarily

crude oil , water and gas, said system including: conduit means for receiving a main fluid flowstream from...

...quantity; means for determining the flow rate of said sample flowstream flowing through said first heat exchanger means; temperature sensing means arranged with respect to said sample flowstream for sensing the temperature differential of said sample flowstream across said first heat exchanger means; and temperature sensing means arranged with respect to said main flowstream for sensing the temperature differential of said main flowstream and said heat exchange fluid through said second heat exchanger means to determine the total liquid flow rate...

...said liquid; means for determining the flow rate of said sample flowstream flowing through said heat exchanger means; temperature sensing means arranged with respect to said sample flowstream for sensing the temperature differential of said sample flowstream across said heat exchanger means; and temperature sensing means arranged with respect to said main flowstream for sensing the temperature differential of said...

...exchanger for exchanging heat with said liquid sample; conducting said main flowstream through said first heat exchanger and measuring the temperature difference of said main fluid flowstream as determined by heat exchange with a known quantity of a known heat exchange fluid; conducting said sample flowstream through said second heat exchanger and measuring the heat exchanged with said sample flowstream to determine the specific heat of the liquid of said fluid flowstream; and measuring the liquid flow rate based on the flowrate of a heat exchange fluid, the specific heat of the heat exchange fluid, a temperature difference of the...

...from said fluid flowstream before passing said main flowstream in heat exchange relationship with said heat exchange fluid; reinjecting said gas into said main flow stream; measuring the temperature change of said main flowstream resulting from reintroduction of said gas to said main flowstream and measuring the temperature change of said main flowstream resulting from exchanging heat with said heat exchange fluid to determine the flowrate of gas in said main flowstream...

...The method set forth in claim 20, including the step of: determining the fraction of oil and water in said main flowstream by passing a sample of said liquid mixture at known flowrate through said second heat exchanger in heat exchange relationship with a heat exchange fluid of known flowrate and measuring the temperature change of said sample of said liquid mixture and said heat exchange fluid...

...oil and water in said liquid mixture by passing said sample flowstream through said second heat exchanger comprising means for adding heat to said sample flowstream, measuring the temperature differential incurred by a known volumetric flowrate of said sample flowstream when being...flowstream at a known flowrate of said sample; passing said sample of known flowrate through heat exchange means to change the temperature of said sample, and measuring the temperature change of said sample in said heat exchange process to determine the specific heat of said sample...

9/AZ,TI,KWIC/99 (Item 99 from file: 340)

Dialog Acc No: 1861027
PROCESS FOR RECOVERING PETROLEUM FROM FORMATIONS CONTAINING VISCOUS CRUDE

OR TAR; IN-SITU CONDENSATION OF HYDROCARBON SOLVENT VAPORS MIXED WITH WATER VAPOR CAUSING FLOW OF OIL

...IN-SITU CONDENSATION OF HYDROCARBON SOLVENT VAPORS MIXED WITH WATER VAPOR CAUSING FLOW OF OIL
Non-exemplary Claims:
...14. A process in accordance with claim 12 wherein the sensible heat content of the working vapor is regulated to maintain a desired solvent/crude ratio in...

9/AZ,TI,KWIC/100 (Item 100 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1812015
COMBINED ENGINE COOLING AND LUBE SYSTEM

Abstract:
...engine cooling and engine lubrication circuits, both of which receive engine oil pumped from the oil sump. The cooling circuit flows oil around hot engine parts and then to a cab heater and to a heat exchanger or a bypass line to sump. A valve controls oil flow to the heat exchanger and to the bypass line as a function of oil temperature...

...exchanger has a pair of outlets which discharge oil at different temperatures and at different flow rates. Less oil flows from the cooler outlet and this lesser flow is communicated to sump via a charge air cooler. The hotter outlet communicates the larger oil flow directly to sump.
Exemplary Claim:
...combustion engine, an engine cooling and lube system comprising: an engine oil sump; an engine oil pump; a flow divider having an inlet communicated with an outlet of the pump, a first outlet and...
Non-exemplary Claims:
...sensing the temperature of oil in the engine lube circuit, the temperature controlled valve controlling oil flow through the bypass line and the heat exchanger as a function of the temperature sensed by the temperature sensor...

...engine, a bypass line communicating with the sump and a valve coupled to the temperature sensor to control oil communication from the engine to the heat exchanger and to the bypass line as a function of the temperature sensed by the...

9/AZ,TI,KWIC/101 (Item 101 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1808814
FUEL/AUXILIARY OIL THERMAL MANAGEMENT SYSTEM; ARRANGEMENT THAT USED AIRCRAFT FUEL

Abstract:
...heat from the aircraft auxiliary oil systems and having a fuel outlet temperature, a temperature sensing for determining temperature of the fuel leaving the fuel/oil heat exchanger, a recirculating flow control valve having variable positions including an open and a closed position controlled by the...
Exemplary Claim:
...heat from the aircraft auxiliary oil systems and having a fuel outlet temperature; (b) temperature sensing means for determining temperature of the fuel leaving said heat exchanger means; (c) recirculating flow

control means having variable positions including an open and a...
Non-exemplary Claims:
...3. An arrangement as defined in claim 1, wherein said temperature sensoring means is disposed downstream of said heat exchanger means ...

9/AZ,TI,KWIC/102 (Item 102 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1755721
METHOD FOR OPERATING A COAL GASIFIER

Abstract:
...a heat-carrying oil through a cooling jacket of the gasifier, the pressure of the heat -carrying oil is continually measured after having passed through the cooling jacket. If the measured pressure falls below a predetermined...
Exemplary Claim:
...C. AND A MEDIUM PRESSURE VAPOR IS PRODUCED, RECYCLING THE HEAT-CARRYING OIL FROM THE HEAT EXCHANGER INTO THE COOLING JACKET OF THE COAL GASIFIER; CONTINUALLY MEASURING THE PRESSURE OF THE HEAT -CARRYING OIL AFTER HAVING PASSED THROUGH SAID COOLING JACKET AND INTERRUPTING THE SUPPLY OF COAL...

...THE GASIFIER AND THE PASSAGE OF SAID HEATCARRYING OIL TO SAID COOLING JACKET IF THE MEASURED PRESSURE OF THE HEAT -CARRYING OIL FALLS BY ABOUT 2 BAR BELOW A PREDETERMINED PRESSURE AND PASSING WATER OR...
Non-exemplary Claims:
...method as defined in claim 1, wherein said predetermined pressure is 5 bars at an oil flow rate of between 2 and 3 m/s and an oil temperature of 350* C.

9/AZ,TI,KWIC/103 (Item 103 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1723839
OIL DEGRADATION AND TEMPERATURE MONITOR

Abstract:
...prevent retention of oil within the first electrode (14) on the surface (24). A temperature sensor (26) is disposed within the second electrode (18). A heat -conducting potting material (28) fills the initiator electrode (18) and encapsulates the temperature sensor (26...

...electrode (18) within the first electrode (14) to produce a sufficient resistivity for preventing current flow from the oil to the temperature sensor (26).
Non-exemplary Claims:
...6. An assembly as set forth in claim 5 including heat -conducting potting material (28) encapsulating said temperature-sensing means (26) within said second electrode (18...

...12), perforations (16) in said first electrode (14) spaced circumferentially thereabout and axially therealong, temperature-sensing means (26) disposed within said second electrode (18), heat -conducting potting material (28) encapsulating said temperature-sensing means (26) within said second electrode (18) and having a radial thickness radially between said...12) to prevent retention of oil within said first electrode (14) on said surface (24), heat -conducting potting material (28) encapsulating said temperature-sensing means

(26) within said second electrode (18) and having a radial thickness radially between said...

9/AZ,TI,KWIC/104 (Item 104 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1710709
CONSTANT TEMPERATURE FRYER/COOKER ASSEMBLY

Abstract:
...the assembly. Further important structure includes a bypass type oil filtering structure, a static pipe oil flow structure at each of the ends of the dispersing pipe, removable components for each of...
Exemplary Claim:
...SURFACE OF SAID COOKING PAN MEANS TO EFFECT A SUBSTANTIAL AMOUNT OF TURBULENCE IN THE FLOW OF COOKING OIL INTO THE COOKING PAN FOR OBTAINING A SUBSTANTIALLY CONSTANT TEMPERATURE OF THE OIL THROUGHOUT THE ...

...BAFFLE MEANS AND THE BOTTOM OF SAID PAN FOR INCREASING THE EFFECTIVENESS OF THE TURBULENT OIL FLOW THROUGH THE PAN AS EFFECTED BY THE AFORESAID ANGLED DISPERSING APERTURES IN SAID PIPE.
12. A METHOD OF COOKING FOOD PRODUCTS OF VARIOUS TYPES COMPRISING THE FLOWING STEPS: EFFECTING A FLOW OF HEATED OIL IN A COOKING APPARATUS; PASSING A PORTION OF SAID OIL THROUGH A HIGH EFFICIENCY HEATER...
Non-exemplary Claims:
...sensitive to the cooking oil temperature includes at least one probe in the path of oil flow in the cooker assembly...

...forth in claim 1, wherein said control means between the thermostat control means and the heat exchanger means includes an electric controller unit, electrical wiring, temperature sensing structure, and a temperature setting control...

...sensitive to the cooking oil temperature includes at least one probe in the path of oil flow in the cooker assembly...

...forth in claim 12, including the further step of filtering about one-third of the oil flow in each cycle thereof...piping, and pump with motor mounted in said cabinet and connected together for effecting continuous flow of oil through said cooking pan during a cooking operation, a heater in series with said pump...

...a predetermined angle relative to the bottom of said cooking pan for effecting a turbulent flow of the cooking oil into said pan, and baffle means substantially over said length of piping for increasing the turbulence of said cooking oil flowing into said pan for achieving a desired constant temperature of the oil...

...forth in claim 17, wherein said pump comprises a contrifugal type pump for high capacity flow rates of cooking oil during operation thereof ...

...forth in claim 20, wherein said oil dispersing means incorporates means for effecting a small oil flow at normally static ends thereof...

...said oil dispersing means includes a substantially rectangular set of pipes, said means for effecting oil flow through normally static ends of the dispersing pipe includes small conical tips thereon, and a baffle structure associated with the conical tips for diverting the

small oil flow therefrom outwardly into the cooking pan...said oil dispersing means includes piping which in turn incorporates means for effecting a small oil flow at each end of the normally static ends thereof...

...33. A cooking fryer as set forth in claim 32, wherein said means for effecting oil flow through the normally static ends of the dispersing pipe includes small conical tips thereon, and a baffle structure associated therewith for divering such small oil flow outwardly into the cooking pan...

...comprises a fluid centrifugal type pump having an input and an output for high capacity flow rates of cooking oil during operation thereof ...two normally static ends, with means being provided therewith for permitting a small amount of oil flow through each of said ends...

...40, further including a baffle between the said normally static ends for diverting said small oil flow therefrom outwardly into the center of the cooking pan...

9/AZ,TI,KWIC/105 (Item 105 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1685446
APPARATUS FOR ABOVEGROUND SEPARATION, VAPORIZATION AND RECOVERY OF OIL FROM OIL SHALE; ANAEROBIC SYSTEM

Abstract:
...fins on the banks of tubes being aligned with each other to provide passage for flow of crushed oil shale therethrough. A separating device is connected to the cracking and distillation zone to withdraw...
Non-exemplary Claims:
...for sensing includes first pressure sensing means connected in said preheat zone, and second pressure sensing means connected in said waste heat recovery zone, d. said first pressure sensing means operatively connected to said first vacuum means, and e. said second pressure sensing means...

9/AZ,TI,KWIC/106 (Item 106 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1680890
DIESEL FUEL HEATER WITH FUEL RESERVOIR MEANS

Abstract:
...reservoir defined therein. This quantity is heated by the heater's positive temperature coefficient (PTC) thermistors (and heat conductive mounting plate) to assure a heated quantity of fuel will be pumped...
Exemplary Claim:
...and said insulative housing defining a fuel passage therein, a plurality of positive temperature coefficient thermistors spacedly positioned on said mounting plate for contacting fuel passing within said fuel passage and...

...fuel to an established temperature, and means for coupling electrical power to each of said thermistors , the improvement comprising reservoir means within said insulative housing for maintaining a predetermined quantity of...
Non-exemplary Claims:
...8. The improvement according to claim 5 wherein said positive

temperature coefficient thermistors ar spacedly positioned on said planar lower surface of said mounting plate...

...the waxing temperature level of the fuel oil to prevent clogging of the filter upon flow of the fuel oil therethrough during cold engine operation, the area between the inlet of the fuel conducting means...

9/AZ,TI,KWIC/107 (Item 107 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1590859
POWER TRANSFORMER WASTE HEAT RECOVERY SYSTEM; IN AN OIL-COOLED POWER TRANSFORMER

Abstract:
...such as water. Flow transducers and electrical temperature sensors may be used to monitor the flow rates of the oil and water, and the temperature of the oil and water in various parts of the...
Exemplary Claim:
...oil from the top portion of the transformer to the heat exchanger; circulating the hot oil through an oil flow path in the plate heat exchanger; providing water to the heat exchanger from a source...

...exchanger in which the water flow path is in a heat exchange relationship with the oil flow path, thereby heating the water; storing the heated water; and feeding the stored heated water...
Non-exemplary Claims:
...oil through said radiator; plate heat exchanger means external to said transformer and having an oil flow path with a hot oil inlet and a cool oil outlet, and a water flow path in a heat transfer relationship with said oil flow path, said water flow path having a cool water inlet and a hot water outlet, said hot oil inlet...

...storage means connected between said hot water outlet and said cool water inlet of said heat exchanger means; a first set of temperature and flow sensors connected to said transformer oil inlets and outlets; a second set of temperature and flow sensors connected to said heat exchanger means water inlet and outlet; and control means responsive to said first and second...

...second sets of temperature and flow sensors monitor the inlet and outlet temperatures and the flow rates of said cooling oil circulating through said heat exchanger means, and monitor the inlet and outlet temperatures and the...

...control means is responsive to said temperatures and flow rates to optimize the ratio of flow rates of said cooling oil circulating through said heat exchanger means to the flow rate of said water to maximize...

...5. The process as defined in claim 4 which comprises; controlling the rate of flow of oil through the plate heat exchanger oil flow path, and controlling the rate of flow of the water through the plate heater exchanger water flow path; whereby the rate of flow of oil and the rate of flow of the water causes a sufficiently high maximum oil temperature in the transformer to obtain...

9/AZ,TI,KWIC/108 (Item 108 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 15760[redacted]
FUEL/OIL HEAT EXCHANGE SYSTEM FOR AN ENGINE

Exemplary Claim:
...system for removing oil from the gearbox and passing it through the heat exchanger in heat exchange relationship with the fuel therein, a temperature sensitive device for sensing the temperature of the fuel at a location downstream of the heat exchanger, and, means controlled by the temperature sensitive device for varying the level of the oil in the gearbox in order to vary...
Non-exemplary Claims:
...thus causing the oil level in the tank to rise to the extent that the oil flows over the baffle before passing to the inlet of the scavenge system...

...thus causing the oil level in the tank to rise to the extent that the oil flows over the baffle before passing to the inlet of the scavenge system.

9/AZ,TI,KWIC/109 (Item 109 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1564124
OIL COMBUSTION SYSTEM

Exemplary Claim:
...for burning.
6. The system of claim 1 further comprising a positive temperature co-efficient thermistor attached to said siphon nozzle means for heating the oil prior to burning it.
Non-exemplary Claims:
...conduit means; and obstruction means disposed proximately to said low pressure output for obstructing the flow of oil , creating a venturi effect and reducing the pressure of the oil presented at the low...

...3. The system of claim 2 wherein an oil flow path is formed between said high pressure input and said high pressure output and said...

...4. The system of claim 3 wherein an oil flow path is formed between said high pressure input and said high pressure output and said...

...means comprises: a cylinder mounted in said low pressure output and extending therefrom into said oil flow path; and a slot formed longitudinally in said cylinder and being disposed in said oil flow path in an orientation facing the high pressure output whereby said cylinder and slot create...

...The system of claim 7 wherein said means for heating comprises a positive temperature coefficient thermistor mounted on said block adjacent said oil retention chamber...

9/AZ,TI,KWIC/110 (Item 110 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1563722
ELECTRONIC CONTROL UNIT FOR INTERNAL COMBUSTION ENGINES

Abstract:
...a control for providing heating power to the glow plugs. The engine also has engine oil and transmission oil flowing therethrough, and a fan

for cooling the oil. A first switch turns the fan on and off. There is included a central electronic control which includes thermistors for sensing a temperature related to the temperature of the engine and for providing a...

...percent and which depends on the voltage level of the source of DC voltage. The thermistors are disposed to measure the temperature of the first and eighth heads and the engine...
Non-exemplary Claims:
...circuit having a characteristic curve matching said characteristic curve of said glow plugs, and a thermistor in circuit with said electronic circuit...11. An engine as defined in claim 10 wherein said temperature sensors further comprise thermistors .
...

...An engine as defined in claim 11 having eight heads and further comprising: a first thermistor for measuring temperature in a first head; a second thermistor for measuring temperature in an eighth head; a third thermistor for measuring temperature of said engine oil; and a fourth thermistor for measuring temperature of said transmission oil, wherein said first, second, third and fourth thermistors are operatively associated with said duty cycle setting means; said fan providing cooling air for...a characteristic curve matching said characteristic temperature curves of said glow plugs, and a first thermistor in circuit with said electronic circuit...as defined in claim 23 wherein said plurality of temperature sensors comprises a plurality of thermistors .
...

...An engine as defined in claim 24 having eight heads, and further comprising: a second thermistor for measuring temperature in a first head; a third thermistor for measuring temperature in an eighth head; a fourth thermistor for measuring temperature of said engine oil; and a fifth thermistor for measuring temperature of said transmission oil, wherein said second, third, fourth and fifth thermistors are operatively associated with and provide outputs for said central electronic control means...

...having first and second inputs wherein said outputs of said second, third, fourth and fifth thermistors are fed to said first input of said second means for setting a second duty...

...comprising means for sensing a failure in each of said second, third, fourth and fifth thermistors and for providing a corresponding output and being connected to said first switch means such

9/AZ,TI,KWIC/111 (Item 111 from file: 340)

Dialog Acc No: 1534741
PROCESS AND APPARATUS FOR UTILIZING WASTE OIL

Abstract:
...a heater box in a boiler (22) and controlled by valving means (60) which permits flow from only one of the oil storage sources, and effectively precludes any commingling of oil from the sources either at the...
Non-exemplary Claims:
...of preheating the waste oil fuel includes electrical heating means in order to provide a flow of preheated waste oil fuel from said electrical heating means to the heating mechanism whereby the waste oil fuel...

...5. The process in accordance with claim 1, further comprising the step of sensing the temperature of heat generated by the initial burning of conventional heating oil fuel, the heat being supplied to...

9/AZ,TI,KWIC/112 (Item 112 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1460167
VEHICLE EXHAUST GAS WARM-UP HEATER SYSTEM

Abstract:
...by a temperature sensing device diverts the exhaust gas from an exhaust system to the heat exchanger. The temperature sensing device actuates the diverter valve at a predetermined coolant temperature diverting the exhaust gas to...
Exemplary Claim:
...means; a diverter valve for diverting the exhaust gases from the exhaust system to the heat exchanger means; and means for sensing the temperature of the coolant and for actuating the diverter valve at a predetermined coolant...
Non-exemplary Claims:
...choke having a temperature sensing means and wherein the temperature sensing means of the choke senses the coolant temperature being conveyed from the heat exchanger means back to the engine for controlling the choke...

...lubrication location, the portion of the oil being of an amount that substantial interruption of oil flow in the oil system is avoided; means for conveying the exhaust gases from the exhaust system to the...

...means; a diverter valve for diverting the exhaust gases from the exhaust system to the heat exchanger means; and means for sensing the temperature of the oil and for actuating the diverter valve at a predetermined coolant...

9/AZ,TI,KWIC/113 (Item 113 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1434043
HIGH PERCENTAGE WATER CONTENT MONITOR

Abstract:
...includes a housing which is adapted to be connected to a pipe through which the oil and brine mixture is flowing so that the oil and brine mixture flows through a portion of the housing. A sensor is mounted within the housing so that the sensor is suspended in the flowing oil and brine mixture. The sensor provides a signal corresponding to the percent by volume of...
Exemplary Claim:
1. An oil-in-brine mixture comprising housing means connected to a pipe having an oil and brine mixture flowing through the pipe in a manner so that the oil and brine mixture flows through a portion of the housing means; sensor means mounted within said housing means in...
Non-exemplary Claims:
...A monitor as described in claim 2 in which the temperature sensing means is a thermistor .
...

...3 in which the sensing means includes a head having a channel through

which the oil flows , a pair of toroidal coils mounted in the channel of the mounting head, one coil...

...to said sensor arm means so that when said sensor head means is positioned the oil -in-brine mixture flows through it, the thermistor , and wire means for connecting the one coil to the excitation means and the other...

...oil-in-brine comprising the steps of arranging a housing with a pipe having an oil and brine mixture flowing through the pipe in a manner so that the oil and brine mixture flows through a portion of the housing, detecting the water content of oil and brine mixtures...

...described in claim 6 in which the detecting step includes transmitting electromagnetic energy into the flowing oil and brine mixture in response to the excitation voltage, receiving the electromagnetic energy at another

9/AZ,TI,KWIC/114 (Item 114 from file: 340)

Dialog Acc No: 1431151
EXHAUST GAS TURBOCHARGER

Abstract:
...turbocharging an internal combustion engine, and which is characterized by the ability to avoid excessive heat transfer to the bearings and any other heat sensitive components. In the preferred embodiment, the lubricating oil for the bearings in the turbocharger housing...
Exemplary Claim:
...apparatus for turbocharging an internal combustion engine, and characterized by the ability to avoid excessive heat transfer to heat sensitive components thereof, said apparatus comprising an exhaust gas turbine comprising a turbine housing and a...
Non-exemplary Claims:
...gas turbine or the like, and characterized by the ability to avoid the overheating of heat sensitive components thereof, and comprising a bearing housing having an end wall with an opening therethrough... turbocharging an internal combustion engine, and characterized by the ability to avoid the overheating of heat sensitive components thereof, and comprising an exhaust gas turbine comprising a turbine housing and a turbine...

...point radially beyond said inlet of said passageway, and the rotation of said shaft causes oil to flow through said passageway by the resulting siphoning effect...

9/AZ,TI,KWIC/115 (Item 115 from file: 340)

Dialog Acc No: 1411845
SYSTEM FOR HEATING THE SERVICE CABIN OF A MOTOR VEHICLE

Exemplary Claim:
...line, and a thermostat operatively connecting said thermostatic valve and said return line from said heat exchanger for heat sensing the oil from said heat exchanger before reaching said oil reservoir, whereby the flow of oil may be selectively directed by operation of said manually operable valve means through said throttling...

...through said hydraulic apparatus or only through said by-pass line depending on the temperature sensed by said thermostat for thereby regulating the temperature of said heat exchanger.

Non-exemplary Claims:

...heating system according to claim 1, wherein an oil pipe section is provided in said oil conduit system for dividing the flow as fed by the hydraulic pump directly to said heat exchanger while by-passing said ...

...being coupled into said oil pipe section so that during operation of said gear, the oil flowing through said pipe section is likewise heated.

9/AZ,TI,KWIC/116 (Item 116 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1340804
ENERGY CONVERSION METHOD WITH WATER RECOVERY

Abstract:

...industrial process heat, mainly in the form of steam up to 200*400* C. The sensible heat contained in a water body is concentrated as latent heat in low pressure water vapor which is thermo-compressed by steam ejection to an intermediate...

Non-exemplary Claims:

...of ejecting steam prior to its thermo-compression in the respective converging-diverging throats by flowing hot lubricating oil from the engine in heat transfer relation with said vapor.

9/AZ,TI,KWIC/117 (Item 117 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1191949
APPARATUS AND METHOD TO CONTROL PROCESS TO REPLACE NATURAL GAS WITH FUEL OIL IN A NATURAL GAS BURNER

Abstract:

...A LIQUID LEVEL CONTROLLER SENSING THE LIQUID LEVEL IN THE SEPARATOR TO AUTOMATICALLY CONTROL THE FLOW OF THE FUEL OIL TO THE VAPORIZER, 2. A RATIO FLOW CONTROLLER SENSING THE FLOW OF THE FUEL OIL AND OF THE DILUENT TO THE VAPORIZER TO AUTOMATICALLY CONTROL THE FLOW OF THE DILUENT TO A SET RATIO OF THE FLOW OF THE FUEL OIL , 3. A PRESSURE CONTROLLER SENSING THE PRESSURE AT THE VAPORIZER OUTLET AND DOWNSTREAM OVERHEAD TO...

Exemplary Claim:

...and/or flow rates of said mixing, vaporizing and separating by a. automatically controlling the flow of said fuel oil with a liquid level controller sensing the liquid level in said separator, b. automatically controlling the flow of said diluent with a ratio flow controller sensing the flow of said fuel oil and of said diluent to said vaporizer to control said flow of said diluent to a set ratio of said flow of said fuel oil , and c. automatically controlling the vaporizing heat input to said vaporizer with a pressure controller sensing the pressures of the vaporizer outlet and separator overhead, and d. controlling the flow of...

Non-exemplary Claims:

...or flow rates of said mixing, vaporizing, separating, and superheating by a. automatically controlling the flow of said fuel oil with a liquid level controller sensing the liquid level in said separator, b. automatically controlling the flow of said diluent with a ratio flow controller sensing the flow of said fuel oil and of said diluent to

said vaporizer to control said flow of said diluent to a set ratio of said flow of said fuel oil , c. automatically controlling the vaporizing heat input to said vaporizer with a pressure controller sensing the pressures of the vaporizer outlet and separator overhead, and d. controlling the flow of...

...9. The method of claim 6 wherein said controlling also comprises automatically controlling the heat input to said superheater with a temperature controller sensing the temperature of said superheater overhead effluent...a liquid level controller sensing the liquid level in said separator to automatically control the flow of said fuel oil to said vaporizer, a ratio flow controller sensing the flow of said fuel oil and of said diluent to said vaporizer to automatically control said flow of said diluent to a set ratio of said flow of said fuel oil , a pressure controller sensing the pressure at the vaporizer outlet and separator overhead to automatically...
...liquid level controller sensing the level of liquid in said separator to automatically control the flow of said fuel oil to said vaporizer, a ratio flow controller sensing the flow of said fuel oil and of said diluent to said vaporizer to automatically control said flow of said diluent to a set ratio of said flow of said fuel oil , a pressure controller sensing the pressure at the vaporizer outlet and separator overhead to automatically...

9/AZ,TI,KWIC/118 (Item 118 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1119479
SUCTION ACCUMULATOR FOR REFREIGERATION SYSTEMS

Abstract:
...present, the bulb senses superheat and causes the expansion valve to open, allowing relatively free flow of the oil from the accumulator tank into the outlet conduit. Another discriminating device is a float whose...
Non-exemplary Claims:
...5. An improved suction accumulator, as in claim 2, including a heat source positioned to affect the temperature sensing means...

...14. A method as in claim 12, which includes the step of sensing the super heat of the contents of the accumulator means...

...of; sensing the temperature of a lower portion of the accumulator means with a temperature sensor ; applying an external source of heat to the sensor ; and closing the valve when the temperature of the sensor decreases.

9/AZ,TI,KWIC/119 (Item 119 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1118371
APPARATUS AND METHOD FOR THE RECOVERY OF FUEL PRODUCTS FROM SUBTERRANEAN DEPOSITS OF CARBONACEOUS MATTER USING A PLASMA ARC

Abstract:
...source to allow the entrapped oil in the tar sand or the kerogen in the oil shale to flow to a reservoir for collection. When economically justified, the carbonaceous matter in the tar sands...
Non-exemplary Claims:
...includes a decrease in the viscosity of the entrapped oil in said

stratum whereby said oil may flow to a collection point for recovery as a said recoverable fuel product...

...physical transformation includes the liquification of a portion of the kerogen therein whereby the crude oil so formed may flow to a collection point for recovery as said recoverable fuel product...13. The method of claim 12 including the step of utilizing a portion of the sensible heat produced in said upgrading step for producing steam to be used as said reactant...

9/AZ,TI,KWIC/120 (Item 120 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1103005
MARINE STOVE SAFETY CONTROLS

Abstract:
...predetermined low value. The switches are effective, when actuated by the thermostat, to cut off flow of oil to the burner, either by stopping operation of a pump or by effecting closing of...

...reached so that cooling of the flue gases thereafter will not result in resumption of oil flow to the heater. In one form of the invention the same circuit arrangement can be...
Exemplary Claim:
...an oil burning heater having an oil supply conduit and control means therein for controlling flow of oil therethrough, the improvement comprising: electrically operated means for actuating said control means; temperature responsive thermostatic means positioned to sense a temperature that is indicative of the heat produced by said heater, said thermostatic means including a movable member; means responsive to movement of said member to actuate said electrical means to stop flow of oil in said conduit when the sensed temperature reaches a predetermined low temperature or a predetermined...

9/AZ,TI,KWIC/121 (Item 121 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1061355
HYDRAULIC SHOCK ABSORBER

Exemplary Claim:
...communication between the first and second chambers; first check valve means for allowing the free flow of damping oil from the second chamber into the first chamber through the first undamping passage means when...

...the first damping passage and at its other end with the second chamber; a first heat -sensitive valve unit for changing the opening area of the first opening-variable orifice as a function of the temperature of damping oil; said first heat -sensitive valve unit is manually adjustably coupled to the piston assembly so as to change the initial opening area of the first openingvariable orifice; second check valve means for allowing restricted flow of damping oil from the first chamber into the second chamber through the first and second damping passages...

...communication between the second and third chambers; third check valve means for allowing the free flow of damping oil from the third chamber into the second chamber through the second undamping passage

means when...

...the fourth damping passage and at its other end with the third chamber; a second heat -sensitive valve unit for changing the opening area of the second opening-variable orifice as a function of the temperature of the damping oil; said second heat -sensitive valve unit is manually adjustably coupled to the foot valve assembly so as to change...

...opening area of the second opening variable orifice; fourth check valve means for allowing restricted flow of damping oil from the second chamber into the third chamber through the fourth and fifth damping passages...

Non-exemplary Claims:

2. The hydraulic shock absorber according to claim 1, wherein said first heat -sensitive valve unit includes a first movable valve defining the first opening-variable orifice with the inner wall of the first damping passage and a first heat -sensitive actuating member for shifting the first movable valve to vary the opening area of the first opening-variable orifice, said first heat -sensitive actuating member comprising a heat -sensitive material which is substantially mechanically incompressible, and expansible and contractible at temperature rise and fall respectively; and said second heat -sensitive valve unit includes a second movable valve defining the second opening-variable orifice with the inner wall of the fourth damping passage and a second heat -sensitive actuating member for shifting the second movable valve to vary the opening area of the second opening-variable orifice, said second heat -sensitive actuating member comprising a heat -sensitive material which is substantially mechanically incompressible, and expansible and contractible at temperature rise and fall...

...3. The hydraulic shock absorber according to claim 2, wherein said heat -sensitive material is one selecteD from the group consisting of wax and aluminium alloy...

9/AZ,TI,KWIC/122 (Item 122 from file: 340)

Dialog Acc No: 1041311
OIL TEST APPARATUS; OXIDATION BY-PRODUCTS

Exemplary Claim:

...REACTION OF ONE OF SAID ELECTRODES TO THE AMOUNT OF OXIDATION BY-PRODUCTS IN THE OIL SAMPLE FOR DIRECTLY PRODUCING A FLOW OF INTERNALLY SOURCED CURRENT HAVING A VALUE PROPORTIONAL TO SAID AMOUNT OF OXIDATION BY-PRODUCTS...

Non-exemplary Claims:

...9. Apparatus as claimed in claim 8 wherein said temperature compensating network includes a thermistor device connected to said one electrode ...

9/AZ,TI,KWIC/123 (Item 123 from file: 340)

Dialog Acc No: 1026187
OIL WELL RATE METERING METHOD

Abstract:
A process for determining the production rate of an oil well by measuring the intensity of radiant heat from a fire at the end of a flowline

leading from the oil well. The oil from the well head is lead through a horizontal flowline to a...

9/AZ,TI,KWIC/124 (Item 124 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1010440
SOLAR HEAT PUMP

Exemplary Claim:
...means of heating the said primary flow of circulating liquid by solar radiation to a sensible temperature greater than the sensible temperature of the outside heat sink, and a boiler means of causing liquid refrigerant to boil to a vapor, and...

...condenser into the said boiler, and an evaporator in which refrigerant liquid evaporates at a sensible temperature lower than the sensible temperature of the outside heat sink, and means of introducing liquid refrigerant into the said evaporator from the said condenser...

...means of heating the said primary flow of circulating liquid by solar radiation to a sensible temperature greater than the sensible temperature of the outside heat sink, and a boiler means of causing liquid refrigerant to boil to a vapor, and...

...of the said pressure causes rotation of the said crankshaft in the function of a heat engine, and the inside of a building maintained at a sensible temperature higher than the sensible temperature of the outside heat sink, and a condenser in which condensing occurs at a sensible temperature higher than the sensible temperature of the said inside of a building, and means...

...into the said boiler means, and an evaporator in which refrigerant liquid evaporates at a sensible temperature lower than the sensible temperature of the outside heat sink, and means of transferring heat from the outside heat sink to the said evaporator to provide latent heat of vaporization...
Non-exemplary Claims:
...4. Claim 3 and an oil separator to receive the vapor and oil flowing from the said means of mixing, and means of delivering vapor from the said separator...

...cylinder but moves in close proximity to the said walls, and means of injecting a flow of oil into the space between the said extension and the said walls of the said cylinder...10. Claim 9 and an oil separator to receive the vapor and oil flowing from the said means of mixing, and means of delivering vapor from the said separator...

...cylinder but moves in close proximity to the said walls, and means of injecting a flow of oil into the space between the said extension and the said walls of the said cylinder...

...and means of detecting the condition of low oil level in the sump means after oil has been carried by vapor flow from the said bearing surfaces to the said condenser and then trapped in the said...the said boiler means to the said heat engine, and means of providing a restricted flow drainage of the said liquid oil from the said oil receiver into the said boiler pipe, and means of separating liquid...

9/AZ,TI,KWIC/125 (Item 125 from file: 340)

DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 1001380
HEAT- SENSITIVE SUBSURFACE SAFETY VALVE

HEAT- SENSITIVE SUBSURFACE SAFETY VALVE

Abstract:
...tubing string centered in a well drilled in the earth normally for the production of oil or gas. Under normal flow conditions, a spring holds a flapper valve in an open position out of the flow...
Exemplary Claim:
...housing having a longitudinal bore therethrough and a valve receiving pocket; a reservoir containing a heat sensitive fluid expandable with increased temperature, said reservoir surrounding at least a part of said bore...

...rotate about said pivot to an open position within said pocket; means responsive to said heat sensitive fluid to rotate said valve in a direction opposite the rotation caused by said biasing...
Non-exemplary Claims:
2. A valve as defined in claim 1 in which said mEans responsive to said heat -sensitive fluid includes: a piston within said reservoir movable by said heat -sensitive fluid; force transmitting means between said piston and said valve to force said valve into...

9/AZ,TI,KWIC/126 (Item 126 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0995235
METHOD AND DEVICE FOR THE CONTINUOUS AUTOMATIC ANALYSIS OF THE FILTERABILITY POINT OF LIQUID SUBSTANCES, PARTICULARLY DIESEL OIL

Abstract:
...for the continuous automatic analysis of the filterability point of liquid substances such as Diesel oil . The Diesel oil flows through a measuring circuit at a constant flow rate by means of a volumetric pump...

...below the assumed filterability point of the substance. A heating element is provided along the flow path of the Diesel oil for melting microcrystals which form on the filter in the filtering chamber of the measuring...
Non-exemplary Claims:
...3. An apparatus according to claim 1, wherein the thermosensitive element is a thermistor .

9/AZ,TI,KWIC/127 (Item 127 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0980325
CONSTANT OIL LEVEL CONTROL FOR TRANSMISSION SUMP

Abstract:
...full flow connection from the reservoir for gravity feed at a low volume rate of flow to the sump. When the oil level is high the float permits the pressure to open the relay valve and the...

...sump to the reservoir to reduce the oil level. In a modification a level indicating thermistor controls a solenoid controlled relay valve similarly controlling the oil level valve.

Exemplary Claim:
...sensor being a solenoid operative to control said very low force relay valve element and thermistor means operative to control said solenoid.

9/AZ,TI,KWIC/128 (Item 128 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0963147
APPARATUS AND METHOD FOR DETERMINING FLUID FLOW RATES FROM TEMPERATURE LOG DATA

Abstract:
...which are representative of temperature changes attributed to heat transfer between the flowing fluid and heat conductive media surrounding the flow path. Measured temperatures are compared with temperatures computed from a model for heat transfer representative of the conditions known to be present but which also must incorporate estimates...

...flow rates and, in some cases, volumetric flow rates are then computed. Optional output includes measured temperatures along with temperatures computed using the adjusted model for heat transfer and the final estimate. The method is particularly applicable to determining flow rates of fluids produced in oil wells at each of several possible entry points, especially where these entry points are spaced...
Non-exemplary Claims:
...said flowing fluid is at a temperature different than the equilibrium temperature of said subsurface heat conductive media over at least a portion of said measurements causing a radial heat transfer between said media and said fluid...flow rate of fluid produced from subsurface formations and flowing through a borehole surrounded by heat conductive media comprising: producing measurements representative of the temperature of the fluid as it flows through a portion of the borehole and experiences a non-linear rate of radial heat transfer with the surrounding heat conductive media; computing temperatures corresponding to the measurements from a given model for the radial heat transfer using an approximation of an unknown value of a parameter in the model which...

...flow rates of fluids produced from subsurface formations and flowing through a borehole surrounded by heat conductive media, comprising: a borehole fluid temperature measuring means for producing measurements representative of the temperature of the fluid as it flows through...

...the borehole and experiences a non-linear rate of radial heat transfer with the surrounding heat conductive media; means for computing temperatures corresponding to the measurements produced by the temperature measuring means, said computing means including means for providing a model...fluid produced from a subsurface formation and flowing through a subsurface flow path surrounded by heat conductive media comprising: producing measurements representative of the temperature of the flowing fluid at a plurality of points along a...

...a fluid produced from a subsurface formation and flowing through a subsurface borehole surrounded by heat conductive media comprising: producing measurements representative of the temperature of the flowing fluid at a plurality of points along a...

...of a fluid produced from subsurface formations and flowing through a flow path surrounded by heat conductive media comprising: means for obtaining measurements representative of the temperature of the flowing fluid at a plurality of points along a...

...the surrounding heat conductive media; means for computing temperatures from a given model for radial heat transfer and comparing said computed temperatures with corresponding measured temperatures; said model including an approximation of an unknown value of a parameter related to...

9/AZ,TI,KWIC/129 (Item 129 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0853166
SPREADING-FLUID RECOVERY OF SUBTERRANEAN OIL

Non-exemplary Claims:
2. The process of claim 1 in which the injected fluid is flowed into contact with oil shale located above the cavity and is flowed down along a generally vertical section of...

...5. The process of claim 4 in which the oil shale being treated contains a heat sensitive mineral component and the rate of its extraction is controlled by adjusting the volumes of...

9/AZ,TI,KWIC/130 (Item 130 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0847913
AUTOMATIC VISCOMETER WITH MULTIPLE CAPILLARY VISCOMETER TUBE

Abstract:
...sample being measured to controlled equilibrium, a series of automatic meniscus sensors to detect the flow of oil , and means for automatically computing viscosity from the sensor output. Thermistors are used as meniscus sensors.
Non-exemplary Claims:
...17. The viscometer tube of claim 14 in which said means for measuring comprises thermistors forming meniscus sensors which penetrate into two spaced regions of each of said capillary tubes...

9/AZ,TI,KWIC/131 (Item 131 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0846505
COOLING SYSTEMS OF SUPERCHARGED DIESEL ENGINES

Exemplary Claim:
...the engine lubricating oil line to cool the oil; common cooling fluid means in series heat exchange relation with said first and second heat exchangers; means sensitive to the pressure of the delivery pipe of the turbo-compressor for controlling the flow rate of the common fluid in heat exchanger relation between said first and second heat exchangers; means sensitive to the temperature of the diesel system for controlling the flow rate of said common...
Non-exemplary Claims:
...a conduit through a third heat exchanger; said pump means induces air across said third heat exchanger to cool said liquid; and said temperature sensitive means comprising a thermostat in a branch of the liquid conduit which is responsive to...

...by said pump; said temperature means is responsive to the temperature in

the engine lubricating oil line; and said pressure sensitive flow controlling means and said temperature sensitive flow controlling means are connected via a common linkage...

9/AZ,TI,KWIC/132 (Item 132 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0808010
LATERALLY EXPANDING OIL SHALE PERMEABILIZATION

Abstract:
An improved process of permeabilizing and recovering water soluble and/or heat sensitive minerals and hydrocarbons from an oil shale formation containing said minerals by forming a cavern...
Exemplary Claim:
...W I N G

AN IMPROVED PROCESS OF PERMEABILIZING AND RECOVERING WATER SOLUBLE AND/OR HEAT SENSITIVE MINERALS AND HYDROCARBONS FROM AN OIL SHALE FORMATION CONTAINING SAID MINERALS BY FORMING A CAVERN...
Non-exemplary Claims:
...permeability within a subterranean oil shale by forming a cavern within a portion that contains heat sensitive carbonate mineral and circulating hot aqueous fluid within the cavern, the improvement which comprises: inflowing hot aqueous fluid into contact with a subterranean portion of oil shale that contains heat sensitive carbonate mineral at a relatively shallow depth, the temperature of said inflowing fluid being high enough to pyrolyze oil shale; flowing hot aqueous fluid downward along a vertically extensive portion of oil shale that contains heat sensitive carbonate mineral, from said relatively shallow depth to a deeper depth; outflowing an aqueous solution...

...permeability within a subterranean oil shale by forming a cavern within a portion that contains heat sensitive carbonate mineral and circulating hot aqueous fluid within the cavern, the improvement which comprises: inflowing hot aqueous fluid into contact with a subterranean portion of oil shale that contains heat sensitive carbonate mineral at a relatively shallow depth, the temperature of said inflowing fluid being high enough to pyrolyze oil shale; flowing a mixture of a hot aqueous fluid, gaseous carbon dioxide and hydrocarbon downward along a vertically extensive portion of oil shale that contains heat sensitive carbonate mineral, from said relatively shallow depth to a deeper depth; outflowing an aqueous solution...

...portions of a relatively solids-free opening within a subterranean oil shale formation that contains heat sensitive carbonate material; inflowing relatively hot and relatively low density aqueous fluid into contact with the...

...which said subterranean oil shale formation contains at least about 5 percent by weight of heat sensitive carbonate material...

9/AZ,TI,KWIC/133 (Item 133 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0729738
HEATING SYSTEM FOR ASPHALT EQUIPMENT

Abstract:
...means installed in an asphalt tank, effects the production of a high

heat input when oil is flowing , and a low heat input when oil is not flowing . ''There are three electrical embodiments disclosed, one involving a plurality of electrically resistive elements all...
Non-exemplary Claims:
...2 in which said means responsive to the flowing or non-flowing condition of the heat -transfer fluid includes a flow sensing means arranged to respond to the pressure of the heat -transfer fluid and connected to effect operation of said heater at a low heating level...

9/AZ,TI,KWIC/134 (Item 134 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0454156
LIQUID LEVEL SENSING AND CONTROL MEANS FOR FLUID DRIVES

Exemplary Claim:
...WITH A LIQUID LEVEL SENSING DEVICE AND A FLOW REGULATING VALVE TO AUTOMATICALLY REGULATE CIRCUIT OIL FLOW TO MATCH HEAT LOAD CONDITIONS. THE FLUID COUPLING IS OF THE TYPE WHEREIN THERE IS...

...OR CLOSING A VALVE IN THE OIL SUPPLY CIRCUIT IN RESPONSE TO THE LIQUID LEVEL SENSOR TO REGULATE THE OIL FLOW TO MATCH THE HEAT LOAD.

9/AZ,TI,KWIC/135 (Item 135 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0304782
TREATMENT OF OIL WELL PRODUCTION

Exemplary Claim:
...TREATER, VALVE MEANS CONNECTED IN THE OUTLET OF THE TREATER AND THROUGH WHICH THE CLEAN OIL PRODUCED FROM THE TREATER FLOWS TO A PRESSURE LOWER THAN TREATER PRESSURE, MEANS CONNECTED TO THE TREATER AND DETECTING THE...

...IN PROXIMITY TO THE POINT OF SEPARATION, AND CONTROL MEANS CONNECTED TO THE SOURCE OF HEAT CONNECTED TO AND ADJUSTABLE BY THE DETECTOR FOR THE DIELECTRIC CONSTANT TO RAISE THE FIRING RATE TO THE HEAT SOURCE WHEN THE...

9/AZ,TI,KWIC/136 (Item 136 from file: 340)
DIALOG(R)File 340:(c) 2001 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 0284175
DIRECTORS OF FLUID FLOW

Exemplary Claim:
D R A W I N G

4. AN OIL FLOW DETECTOR FOR A REFRIGERANT COMPRESSOR HAVING AN ELECTRIC DRIVING MOTOR, HAVING A PASSAGE THROUGH WHICH LUBRICATING OIL FLOWS WHEN SAID COMPRESSOR IS IN OPERATION, HAVING A FIRST PTC THERMISTOR IN HEAT EXCHANGE CONTACT WITH SAID MOTOR, HAVING A PROTECTIVE RELAY WITH AN ENERGIZING COIL, HAVING ELECTRIC SUPPLY CONNECTIONS, AND HAVING A CIRCUIT CONNECTING SAID COIL AND THERMISTOR IN SERIES TO SAID CONNECTIONS, SAID DETECTOR COMPRISING A SECOND PTC THERMISTOR IN SAID PASSAGE AND A HEATER RESISTOR IN SAID PASSAGE IN HEAT EXCHANGE CONTACT WITH SAID SECOND TRANSISTOR, AND COOLED BY OIL FLOW IN SAID PASSAGE, SAID RESISTOR BEING CONNECTED TO SAID

CONNECTIONS, SAID SECOND THERMISTOR BEING CONNECTED IN SAID CIRCUIT IN SERIES WITH SAID COIL AND SAID FIRST THERMISTOR , SAID RELAY HAVING A SWITCH THAT IS CLOSED WHEN THE TEMPERATURE OF SAID MOTOR IS NORMAL, AND WHEN OIL FLOWS IN SAID PASSAGE, AND THAT OPENS WHEN THE TEMPERATURE OF SAID MOTOR HAS INCREASED TO AN ABNORMAL TEMPERATURE, AND WHEN THERE IS NO OIL FLOW IN SAID PASSAGE, AND MEANS INCLUDING SAID SWITCH FOR CONNECTING SAID MOTOR TO SAID CONNECTIONS.

9/AZ,TI,KWIC/137 (Item 137 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

06641201
OIL PAN

ABSTRACT

... oil temperature sensor 60 exposed on a boundary surface A with lubricating oil bends the sensor 60 in an arrow X direction. At that time, a heat insulation cover 50 connected with the sensor 60 and a wire 64 rotates in an arrow Y1 direction with a journal part 62 as a rotating shaft to be made into an opened condition, to make to flow down lubricating oil accumulated in an upper chamber 44 into a lower chamber 46. A lower side main...

9/AZ,TI,KWIC/138 (Item 138 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

05938151
METHOD AND DEVICE FOR SENSING OIL INCLUSION IN WATER

ABSTRACT

PROBLEM TO BE SOLVED: To sense oil inclusion in the water to cool or heat the fuel oil, lubricating, etc., in an internal combustion engine or the like through a...

...of the difference between the obtained water reflectance and that of the oil film surface, oil inclusion in the water flowing into the chamber is sensed.

9/AZ,TI,KWIC/139 (Item 139 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

05688325
OIL HEATER WITH TEMPERATURE ADJUSTMENT CONCURRENTLY SERVING AS OIL LEVEL METER

ABSTRACT

... flexiblity to serve as an oil level meter, and burying a heating unit and a heat sensing element in the inside of this oil level meter...

...as an oil level meter, in the inside thereof, a heating unit 1 and a heat sensing element 2 are buried. The heating unit 1 and the heat sensing element 2 are connected by a lead, a control circuit 3 comprising a voltage comparator...

... oil level meter. In accordance with a temperature of engine oil, internal resistance of the heat sensing element 2 is determined, in accordance with changing of the temperature of oil , a current flowing in the heat sensing element 2 is changed, so as to take out this current changing by a voltage change, when voltage in both ends of the

heat sensing element 2 is decreased lower than specified voltage, a current flowing in the heating unit...

9/AZ,TI,KWIC/140 (Item 140 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

05439208
DETECTION METHOD FOR OIL LEAKAGE OF CABLE

ABSTRACT
PROBLEM TO BE SOLVED: To repair a cable early, lessen the amount of an insulating oil flowing out by the time of detection of oil leakage, and prevent environment contamination by detecting...

...and the temperature alteration in the surroundings of a cable 7 sent out of a heat sensor 9, a data processing control part 6 calculates the average temperature alteration of an insulating...

9/AZ,TI,KWIC/141 (Item 141 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

04641741
VERY LOW TEMPERATURE REFRIGERATING PLANT

ABSTRACT
... of a flow passage 72. Besides, electric heaters 42 and 43 which are electrified to heat when the temperature of oil measured by a temperature sensor 52 lowers to the prescribed temperature are provided on an oil return route 36. Ehen...

... in the winter in a cold district or the like, therefore, no shortage of the flow rate of the oil due to an increase in the viscosity thereof takes place, a compressor 11 is always...

9/AZ,TI,KWIC/142 (Item 142 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

04641740
VERY LOW TEMPERATURE REFRIGERATING PLANT

ABSTRACT
... instruction from a controller 62 and that hot air is sent therefrom to the oil heat exchanger 12A when an outside air temperature measured by a temperature sensor 52 becomes a prescribed temperature (e.g. 0 deg.C) or below. Therefore the temperature of oil flowing through an oil return route 36 does not lower below the prescribed temperature even when the temperature of...

9/AZ,TI,KWIC/143 (Item 143 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

04490751
TEMPERATURE-CONTROLLED UNDER LATHE LUBRICATION SPINDLE DEVICE

ABSTRACT
... spindle and that of an outer cylinder respectively, and controlling the temperature and/or the flow rate of the lubricating oil flowing through the center part of the spindle and those of the cooling oil to cool

...

... of these cooling unit parts is suppressed according to the temperature gradient of the generated heat by using the respective temperature detecting signals of the housing and the spindle.

9/AZ,TI,KWIC/144 (Item 144 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03838748
COOLING DEVICE

ABSTRACT

...detecting two-phase separated condition of refrigerant and refrigerating machine oil optically and outputting the detection as detecting signals, a heat radiation promoting unit, for promoting the heat radiation of a condenser, and a heat radiation control unit, controlling the operation of the heat radiation promoting unit in accordance with the detecting signals...

...CONSTITUTION: The condition of two-phase separation of refrigerant and refrigerating oil , which flow between a receiver dryer 4 and an expansion valve 1a, is decided correctly by a heat radiation controller 7 in a condition that a detecting signal in accordance with the high-pressure liquid phase condition of mixed fluid from an optical sensor 5 is obtained. In a heat radiation control unit 7, receiving a detecting signal showing the change of the amount of permeating light when the mixed fluid has...

... excited condition, further, the operation of a condenser fan 6 is controlled continuously by the heat radiation control unit 7 in accordance with the detecting signals. According to this method, two-phase separation is avoided by the heat radiation promoting...

9/AZ,TI,KWIC/145 (Item 145 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03775474
CONTROL DEVICE FOR VEHICULAR AUTOMATIC TRANSMISSION

ABSTRACT

...CONSTITUTION: A heat sensitive drive unit 60 adjusts the control rate of oil pressure fed to a torque converter...

...torque converter 7 rises because of being proportional to line pressure, which results in increasing flow . Accordingly, the flow of the oil passage to the torque converter 7 is increased to comparatively high vehicle speed with the...

9/AZ,TI,KWIC/146 (Item 146 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03757124
DOUBLE-TANK TYPE FRYER

ABSTRACT

... 2. For example, when the lowered temperature of frying oil is detected by a temperature sensor 27, a controller is operated to increase a combustion heat amount of the burner 14. A pump 17 is under the normal

running condition an...

... automatic controlling valve 25 through the controller so that a portion of thigh temperature frying oil discharged from the pump 17 flows down to the circulating path 22 side through a branched path 24 by a pump 23 and flows into the upper oil tank 1 to raise the surrounding frying oil temperature. An automatic controlling valve 25 is...

9/AZ,TI,KWIC/147 (Item 147 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03604616
AUTOMATIC ENGINE OIL REFILLING DEVICE

ABSTRACT

...CONSTITUTION: A cylindrical body 6 is extended to an oil pan 2 through an oil flowing pipe 7 in which the engine oil O in the oil pan 2 flows and an air pressure balancing pipe 8 approximately equalizing the air pressure in the oil flowing pipe 7 to the air pressure in the oil pan 2. A liquid surface upper...

...and 13 caused by the vibration of an engine 1 and the generation of the heat generated by engine driving. In addition, when troubled, the sensors 12 and 13 can easily be replaced.

9/AZ,TI,KWIC/148 (Item 148 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03592463
QUALITY MEASURING APPARATUS FOR VEHICLE OIL AND VEHICLE

ABSTRACT

...power supply between electrodes 16, and the time t(sub 1) until there is no oil left to flow is measured . Subsequently, a heater 15 is made conductive to heat the fresh oil 8 in the tank 5 to a predetermined temperature. A discharge pipe...

9/AZ,TI,KWIC/149 (Item 149 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03546608
BEARING TEMPERATURE CONTROLLER

ABSTRACT

...change the area of a flow path based on the change of form of a heat - sensitive substance and increasing or reducing the area of the flow path via the valve piece...

... through an opening part of the upper end of an approach pipe 18. Thus the flow path area of the lubricating oil is increased. As a result, the amount of the lubricating oil supplied to the bearing...

9/AZ,TI,KWIC/150 (Item 150 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

03445740
APPARATUS FOR MEASURING CONCENTRATION OF SLUDGE IN LIQUID

ABSTRACT

...CONSTITUTION: While fuel oil to be measured flows inside a measurement tank 10 at an appropriate flow rate, light is projected from one...

... an atmospheric temperature and has a high heating temperature, a resistor circuit 5 including a thermistor and a potentiometer is provided in the vicinity of a photoelectric element 6, and by adjusting the potentiometer a reference output in proportion to a sensing temperature of the thermistor is generated. Then the output of the element 6 is amplified 7, and the ratio...

9/AZ,TI,KWIC/151 (Item 151 from file: 347)

03273287
TEMPERATURE CONTROL VALVE

ABSTRACT

...outlet 26, and a second orifice oil passage 35 is cut off from a second oil outlet 27. Oil allowed to flow in from the oil inlet 25 is therefore supplied directly to the compressor main body via a valve body...

... body 32, and the oil outlet 26. When the oil temperature is raised by compression heat , oil temperature in a temperature detecting tube storage room 23 is also raised, the paraffin 29 is thermally expanded, the shaft...

...27, and the oil passage 34 is cut off from the oil outlet 26. The oil allowed to flow into the oil inlet 25 is allowed to flow out via the storage room 24, the oil passage 33, the oil passage 35 and...

9/AZ,TI,KWIC/152 (Item 152 from file: 347)

02376107
AIR FLOW RATE CONTROLLING DEVICE FOR GUN TYPE BURNER

ABSTRACT

...of a burner by controlling the flow rate of a primary air, by fitting a heat -sensitive and deformable element in the neighborhood of the end of a nozzle tip...

...CONSTITUTION: A heat - sensitive and deformable element 5, which controls the flow rate of a primary air flowing around...

... temperature is low before ignition, circulating gaps 4 are narrow because the blades of a heat -sensitive and deformable element 5 are scarcely opened. That is, spreading of flames to oil particles in an air flow can be promoted by throttling the air flow rate. The blades are opened and the...

9/AZ,TI,KWIC/153 (Item 153 from file: 347)

02166722
HEAT SENSITIVE AIR FLOW METER

HEAT SENSITIVE AIR FLOW METER

ABSTRACT

... heat is lost in the air, transient responsivity in case of sudden changes of the oil flow -rates is improved pronouncedly. The resistor 1 is controlled by a transistor to higher temperature...

9/AZ,TI,KWIC/154 (Item 154 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

02126622
FLOW SENSOR

ABSTRACT

PURPOSE: To attain miniaturization and the enhancement of measuring accuracy, by forming a membrane like heat generating resistor on an insulating substrate and further adding a temperature compensating resistor ...

...CONSTITUTION: Both of a heat generating resistor 6 and a temperature measuring resistor 7 are parallelly arranged in the same minute substrate 1 and that part of...

... a fluid is always kept constant even if the temperature of the fluid such as oil flowing through the flow passage 10 changes. A transistor 12 is turned ON and a current supplied from an input terminal 13 is supplied to the resistor 7 to generate heat and the temperature of the fluid is measured by the resistor 6.

9/AZ,TI,KWIC/155 (Item 155 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01675618
OIL LEVEL DETECTOR FOR VEHICLE

ABSTRACT

...CONSTITUTION: When the constant current begins to flow in an oil level sensor 10, it heats up by itself according to the liquid level of oil and increases in internal resistance...

9/AZ,TI,KWIC/156 (Item 156 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01526154
HYDRAULIC CONTROLLER FOR AUTOMATIC SPEED CHANGE GEAR

ABSTRACT

... the time delay under selection, by providing an exchange valve to be controlled by a heat -sensitive member in an oil path for applying the oil pressure onto an friction element...

...valve 102 having a spool 106 to be driven by a spring 110 made of heat -sensitive member is provided in an oil path 100 to be supplied with line pressure when a manual valve 2 is at the advance or retreat position. Consequently, the flow path area of the oil path 100 can be enlarged when the oil temperature is low, resulting in prevention of...

9/AZ,TI,KWIC/157 (Item 157 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01509053
ELECTROSTATIC POTENTIAL DETECTING APPARATUS

ABSTRACT

PURPOSE: To form a probe having no heat source, by connecting the optical voltage sensor of an electrostatic probe connected to an electrode wherein one side of the voltage input...

... element 13'' through the lens 17 and an optical fiber 11. The charge of an oil surface 7 is flowed into a radioactive substance receiving container 1 used as a metal electrode and flows to...

9/AZ,TI,KWIC/158 (Item 158 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01353090
DEVICE TO RECOVER HEAT FROM GAS GENERATED IN COKE OVEN

ABSTRACT

PURPOSE: To provide a heat recovering device which insures safety even when heat pipes are damaged and makes possible full utilization of sensible heat of byproduct gas, made by providing a bundle of heat pipes in an ascending tube for coke oven gas...

... to around 400c. If the heat pipe is damaged, a small amount of heating medium oil (operating fluid) flows out of the clsed heat pipe 1, but it is vaporized quickly and the effect...

9/AZ,TI,KWIC/159 (Item 159 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01277414
THERMO-SENSIBLE FLOW DETECTOR

ABSTRACT

...CONSTITUTION: An insulation oil 6 flows into a nipple 5 through a hose 10. This flow is reduced greatly with a...

... the min. measuring flow rate. Under such a turbulent condition, the power fed to the heat generating body 1 is detected with a detection circuit 7 to find the flow velocity of a fluid 6 whereby a flow rate...

9/AZ,TI,KWIC/160 (Item 160 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01259622
DRY DISTILLATION APPARATUS OF WASTE PLASTICS

ABSTRACT

... the cooling pipe parts 17a, 17b and a cooling pipe 16 and a dry distillation oil flows down into an oil tank 18 and is stored. Detecting the end point of a reaction with a heat sensor (S), opening an electromagnetic valve 35 electrically, erupting CO(sub 2) gas from a CO ...

9/AZ,TI,KWIC/161 (Item 161 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01227591
RECOVERING METHOD FOR HEAT OF CRUDE GAS IN COKEFURNACE

ABSTRACT

... crude gases generated in the cokefurnace are once collected in a collecting pipe and the sensible heat of the crude gases are collected only by a heat exchanger through a tar cooler...

... passage 25 through a gas-liquid separating chamber 22. On the other hand, a circulating oil flows down in the flowdown passage 25 as it forms itself a film, pools in the gas-liquid separating chamber...

... gases generated in the cokefurnace due to the circulation of the gases and the circulating oil moves to heat exchanging water flowing through a heat exchange water chamber 31 to thereby forms a film and the vapor...

... recover heat. Further, the temperature of the gases at the gas flowout port 20 is detected by a temperature sensor 39 and the overflowing position of heat exchange water is adjusted by a control valve 36 so that the surface area of...

9/AZ,TI,KWIC/162 (Item 162 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01176129
TEMPERATURE CONTROL METHOD OF LUBRICATING OIL IN ENGINE

ABSTRACT

...parallelly arranged from a main exhaust pipe 2 of an engine is connected to an oil heater 10, and exhaust gas flows in through an exhaust gas inlet flow path 4, space formed by a heater casing...

... outlet flow path 5 to increase temperature of lubricating oil in the core 13 by heat of the exhuast gas. A temperture sensor S(sub 1) is mounted to a lubricating oil passage to detect the temperature of...

9/AZ,TI,KWIC/163 (Item 163 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

01092716
COOLER FOR INSTRUMENT TRANSFORMER

ABSTRACT

PURPOSE: To make stable measurement of voltage or current by controlling heat generated in an instrument transformer by the use of a transformer housing made of a...

... 23, etc., is fixed by brazing, etc., through which cooling medium such as water and oil is flowed . The CT1 is accommodated in the housing 20, a cover 25 is fitted on the...

9/AZ,TI,KWIC/164 (Item 164 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

00952716
AIR SUCTION FLOWMETER

ABSTRACT

PURPOSE: To prevent sticking of dust and scattering oils on a flow rate sensor without disturbance of air flow by providing the flow rate sensor having a...

...a Venturi part 5 is formed in the inside of its horizontal part, and a detecting element 4 is mounted therein. A heat ray type mass flowmeter 3 is connected to the element 4. A flow rectifying member...

... engine is provided on the down stream side. Thereby, the sticking of dust and scattering oils on the flow rate sensor is prevented without disturbance of air flow.

9/AZ,TI,KWIC/165 (Item 165 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

00731039
METHOD AND APPARATUS FOR INJECTION MOLDING OF SYNTHETIC RESIN

ABSTRACT
... 3b, and 3c, plural resin moldings are injected concurrently. In this case, the pressure and flow rate of the working oil to be supplied to an injection cylinder 6 are controlled in such a way that...

... gradient of pressure kept in the pressure-keeping process is continuously measured, and when the measured value exceeds an allowable set value, the flow rate of heat medium to the other cavities 3a and 3c, for example, is regulated.

9/AZ,TI,KWIC/166 (Item 166 from file: 347)
DIALOG(R)File 347:(c) 2001 JPO & JAPIO. All rts. reserv.

00686690
LUBRICATING DEVICE

ABSTRACT
... automobile, by providing a switch, which is capable of being opened and closed by a heat sensitive member, in a divided oil chamber...

... When the temperature of the lubricating oil supplied to the chamber 7a is low, a heat sensitive member 15e is in a natural state or a switch 15 is in an opened state, so that the lubricating oil in the chamber 7a flows down into a lower oil chamber 7b via through bores 15b, 15d. The lubricating oil further flows through a filter element 11, an oil guide pipe 12 and an oil guide port...

... lubricating portion of an engine. When the temperature of the lubricating oil is increased, the heat sensitive member 15e provided in the upper oil chamber 7a is actuated. As a result, a...

... oscillated clockwise to close the through bore 15b. Accordingly, the lubricating oil in the upper oil chamber 7a flows to an oil cooler 14 through a passage 19. After the oil has been cooled, it enters the...

9/AZ,TI,KWIC/167 (Item 167 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00670660
OIL-COOLED INTERNAL COMBUSTION ENGINE WITH MOTOR-ASSISTED TURBOFAN COOLING
MOTEUR A COMBUSTION INTERNE A REFROIDISSEMENT PAR HUILE AVEC SYSTEME DE

REFROIDISSEMENT PAR TURBO-VENTILATEUR MOTORISE

Fulltext Availability:
Claims

Claim
... an internal combustion engine, comprising:

an oil cooler connectable with a means for providing a flow of engine oil to dissipate the heat carried by said engine lubricant; and a turbofan assembly for generating...

...further comprising means forming an air inlet for said ducted fan section and directing said flow of cooling air through said oil cooler, said oil cooler being upstream of said ducted fan.

13. The motor-assisted cooling...cooling system of claim 15 wherein said control further comprises an airflow sensor in the flow of cooling air to the oil cooler for providing an electric motor operating signal.

18. The internal combustion engine system of...

...flow of cooling air; directing the flows of engine lubricant and cooling air into a heat transfer relationship for cooling the engine lubricant; sensin - at least one condition indicative of an inadequate flow of cooling air, and thereupon using...

9/AZ,TI,KWIC/168 (Item 168 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00626192
TWO STAGE RECIPROCATING COMPRESSORS AND ASSOCIATED HVAC SYSTEMS AND METHODS
COMPRESSEUR A MOUVEMENT ALTERNATIF A DEUX ETAGES ET SYSTEMES HVAC ET PROCEDES ASSOCIES

Fulltext Availability:
Claims

Claim
... in the second direction. The motor circuiting includes a protector having an enclosure holding a heat sensitive switch and a pair of heaters. The heaters, preferably in the form of resistors, are connected to the heat sensitive switch at one end and respectively to the start and run windings of the motor...

...the other end. When the internal temperature of the protector reaches a preselected temperature, the heat sensitive switch operates to open the circuit and remove the windings from power for a preselected...oil is pumped upwardly through the elongated axial supply 190 and a portion of that oil flows through the cross drill 192 to the interface of the cam and crankshaft and through...
...the 39 bearing surface (not shown) of the connecting rod. When the compressor is operated, oil flows upwardly through the oil galleys and then outward through the cross drills to the interface of the connecting rods...with the bearing surface (not shown) of the connecting rod. During operation of the compressor, oil again flows upwardly through the elongated axial supply, outwardly through the cross drill to the circumferential groove...to protect both motor windings in each operating mode. This is accomplished by employing a heat sensitive switch and two heating devices in the protection element, each device being precisely sized for each operating mode. The heat sensitive

switch, for example, is a temperature sensitive bimetal disc internal to the protector. The protector itself is preferably enclosed in a casing ...windings when rotating in the second direction; and a protector including an enclosure with a heat sensitive switch and a pair of heaters, connected to the heat sensitive switch at one end and respectively to the start and run windings of the motor...

...other end, whereby when the internal temperature of the protector reaches a preselected temperature, the heat sensitive switch operates to open the circuit and remove the windings from power for a preselected period of time.
76. The protected motor of claim 75 wherein the heat sensitive switch is a bimetal switch.

77. The protected motor of claim 76 wherein the heaters...

9/AZ,TI,KWIC/169 (Item 169 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00532984
THROTTLE CYCLE CRYOPUMPING SYSTEM FOR GROUP I GASES
SYSTEME DE CRYOPOMPAGE A ETRANGLEMENT POUR GAZ DE GROUPE I

Fulltext Availability:
Claims

Claim
... the compressor 18 by way of the line 20.

The high pressure gas, with the oil removed, flows to an aftercooler 28 through the high pressure line 30. The aftercooler 28 ...K, can be provided between 80 K and 160 K. As stated, Fig. 8 shows measured temperature at the cold surface 44 versus heat load for tests with refrigerant mixtures that were designed for use in a cold trap...

9/AZ,TI,KWIC/170 (Item 170 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00429948
AN OIL RECYCLER
APPAREIL DE RECYCLAGE D'HUILE

Fulltext Availability:
Claims

Claim
... the chamber (77), and conduit means (17,21 and 57, 33 and 35) by which flow of oil to be recycled is directed into and through the filtering means (3) and into and...

...the arrangement being such that, in operation of the recycler, particles are removed from the flow of oil to be recycled in the filtering means (3) and liquid contaminants are evaporated from that...

...41,43,47,49 and 51) is provided in said chamber (77) so that the flow of oil to be recycled flows over each of said elements (41,43,47,49 and 51) within said chamber (2...

...the chamber (77), and conduit means (17,21 and 57, 33 and 35) by which flow of oil to be recycled is directed into and through the filtering

means (3) and into and...

...the arrangement being such that, in operation of the recycler, particles are removed from the flow of oil to be recycled in the filtering means (3) and liquid contaminants are evaporated from that...inside the chamber (77), the magnet (39) being operable to remove metallic particles from the flow of oil to be recycled.

9. An oil recycler (2) according to claim 8, wherein the magnet...

...heat the chamber (77), conduit means (17,21 and 57, 33 and 35) by which flow of oil to be recycled is directed into and through the filtering means (3) and into and...

...the chamber (77) is heated by the heating means (69), particles are removed from the flow of oil to be recycled in the filtering means (3) and liquid contaminants are evaporated from that...

...oil recycler (2), said pressure release valve (61) being responsive to the temperature of the flow of oil to be recycled that is supplied to the recycler (2) whereby to be closed automatically...
...copper.

15. An oil recycler (2) according to any of the preceding claims, wherein a thermistor (53) is provided to monitor the temperature of the chamber (77).

16. An oil recycler...

9/AZ,TI,KWIC/171 (Item 171 from file: 349)

00428893
FIRE RATED FLOOR DOOR AND CONTROL SYSTEM
TRAPPE DE PLANCHER COUPE-FEU ET SYSTEME DE COMMANDE

Fulltext Availability:
Claims

Claim
... in that position by housing 11, rod 12 and check valve 35 which prevents the flow of oil into tank 32.

in the manual, non-emergency mode, valve ...pulling out) valve member 41 of valve 40 thereby opening the valve to permit the flow of oil therethrough. When the door is pulled closed rod 12 is retracted into cylinder housing 11 forcing oil from chamber 14 by the motion of piston 12a. The oil flows through lines 25, 38, 39, valve 40, 42, 29 and 31 into oil tank 32...from hydraulic chamber 14 and retracting rod 12 and piston 12a closing the door. The oil from chamber 14 flows through lines 25, 26, second hydraulic valve 23, 27, 29 and 31 to oil tank...to the hydraulic chamber of the housing and to the hydraulic fluid source; h. a heat sensing or heat actuating means connected to the pressurized source activating means and to the second hydraulic valve...

...pressurized source activating means, wherein when a fire starts and the door is open the heat sensing or heat actuating means opens the second hydraulic valve and actuates the pressurized source actuating means supplying...positions when the door is closed.

10. The door assembly of claim 9 wherein the heat sensing means is a

fusible link.

11. The door assembly of claim 10 wherein the pressurized...

...the atmosphere, a hydraulic valve having a second actuating means, a second hydraulic valve, a heat sensing or heat activating means, a pressurized source activating means, and a pressurized pneumatic source comprising activating the heat sensing means by the fire which opens the second hydraulic valve and actuates the pressurized actuating...

...the door is a horizontal door.

14. The control system of claim 13 wherein the heat sensing means is a fusible link.
15. The control system of claim 14 wherein the first...the atmosphere, a hydraulic valve having a second actuating means, a second hydraulic valve, a heat sensing or heat activating means, a pressurized source activating means, and a pressurized pneumatic source comprising activating the heat sensing means by the fire which opens the second hydraulic valve and actuates the pressurized actuating...

9/AZ,TI,KWIC/172 (Item 172 from file: 349)

00412733
SYSTEM FOR CONTROLLING THE FLOW OF TEMPERATURE CONTROL FLUID
SYSTEME POUR REGULER L'ECOULEMENT D'UN FLUIDE DE CONTROLE DE TEMPERATURE

Fulltext Availability:
Claims

Claim
... replaceable filter 98 may be placed in die pressurized oil line to ensure that thte oil flowing to the valve 10 does not clog the injectors. To provide a return path for...

...plural parts of an engine. In a first embodiment, the EETC valve 100 controls fluid flow to the radiator and the oil pan. When the EETC valve 100 is in a first position, flow to the radiator...

...valve in the second position.

In a second embodiment, the EETC valve 100 controls fluid flow to the radiator, oil pan and a portion of the engine block water jacket. In the depicted embodiment, that...
...EETC valve 100 is in a first position, flow to the radiator is MOW amd flow to die oil pan and the intake manifold is permitted. WN'ben the EETC valve 100 is in a second position, flow to the iadiator is permitiM, flow to die oil pan is blocked, and flow to the intake manifold is either restricted or blocloed- Agaiin, Fig. 7 shows the EETC...not need to be modified to provide the additional control function associated with the fluid flow to the oil pan. It is only necessary to position the opening 158 so that the valve member...in Fig. 8 (i.e., open to TCF flowing to the radiator, closed to TCF flowing to the oil pan), the TCF enters a TCF jacket 200 formed in a cylinder block.

From there...

...in Fig. 7 (i.e., closed to TCF flowing to the radiator, open to TCF flowing to the oil pan), the TCF which enters the TCF jacket 200 is supplied to the TCF jackets...noted above, the EETC valve 100 operates in

a second embodimen wherein it controls fluid flow through the radiator, oil pan and a portion of the engine block water jacket (e.g., the portion around...

...EETC valve 100 is in a first position, flow to the radiator is blocked and flow through the oil pan and through intake manifold is permitted. When the EETC valve 100 is in a second position, flow to the radiator is permitted, flow to the oil pan is blocked, and flow through the intake manifold is either restricted or blocked.

Operation of the second embodiment of...202.

The configuration in Figs. 7 and 8 wherein the EETC valve 100 controls fluid flow to the radiator, oil pan and a portion of the engine block water jacket (e.g., the portion around...

...warm up. In cold temperature environments and during warm up, the EEPC valve 100 allows flow of the TCF to the oil yen and the intake manifold, thereby causing the engine oil and intake manifold to more...in Fig. 8, if it is already not in that position. This will stop the flow of TCF to the engine oil and through the intake manifold, in anticipation of a rapid temperature rise in the oil...cm], instead of .010 inches [0.0254 cm]) and a larger flow orifice for increased flow capacity. Also, since engine oil is not as corrosive as gasoline, internal components of the Siemens type injector do not...type of injector is that it is more difficult to get hydraulic Ruid. such as oil to flow smoothly therethrough.
Fig. 17 shows a block diagram circuit of tit connections to aunud from... valve and/or shutting off the vehicle's air conditioning system. The first of these measures will assist in removing excess heat from the engibnwe block. The second of these measures will reduce the load on the engine, thereby reducing its heat energy output. If these measures still fail to reduce the temperature of the TCF to a safe range, the system...washer fluid or the like. The TCF would then flow to these parts whenever it flows to the oil pan. Alternatively, flow to one or more of these parts can be controlled by a separate flow control valve so that when the TCF flows to the oil pan, the fluid selectively flows to desired parts in accordance with different temperature parameters.

The EETC valves described herein are...jacket will not unnecessarily remove valuable heat energy from the engine block amil engine lulOcation oil . Furthermore, the TCF flowing through the heater core will become hot mon: quickly and will remain hotter than the...EETC valve. If the EETC valve 100 is employed in the system, hot ETC will flow through A! oil pan at viramlly all times when the ambient air temperature is zero degrees Fahrenheit (-17...the TCF in different portions of the water jacket. Thus, as the TCF continues to heat up, the measured TCF temperature, which determines when to open the EETC valve, will be more accurate.
The...fluid, such oil will have a higher viscosity in a cold temperature environment. When the oil is thick and slow flowing , the valve chamber will flll more slowly than when the oil is at a higher...

...and into the chamber, the filling time is decreased to compensate for the higher viscosity oil .

To increase the flow capacity through the inlet fluid injector when employing a fluid injector such as the DEKA...system further comprising an oil pan; a second temperature control fluid passageway leading to the oil pan, me engine computer controlling flow of the temperature control fluid through the second fluid passageway; and a heat exUanger in ...

...second fluid passageway connected a) tGe twat exthanger to allow heat from temperature control fluid flowing therethrough to pass into the oil .

38. A taniperature control system according to claim 5, 6 or 33 wherein the hydraulic...

9/AZ,TI,KWIC/173 (Item 173 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00408561
SELECTED PROCESSING FOR NON-EQUILIBRIUM LIGHT ALLOYS AND PRODUCTS
TRAITEMENT SELECTIONNE D'ALLIAGES LEGERS ET DE PRODUITS HORS D'EQUILIBRE

Fulltext Availability:
Claims

Claim
... effect (see below).

The processing of Mg-alloys vialfrom condensed matter is unique in the sense that the impurity SUBSTITUTE SHEET (RULE 26) level of the feed stock is inevitably remined...conductances for a chill medium, in particular a liquid such as nitrogen, water and/or oils , the conductances located concentrically in the internal cross-section of the tubes not shown hem...

9/AZ,TI,KWIC/174 (Item 174 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00356954
A METHOD AND APPARATUS FOR THE CLEANSING OF OIL FROM REFRIGERATING MACHINES AND HEAT PUMPS
PROCEDE ET APPAREIL DE PURGE D'HUILE DES MACHINES FRIGORIFIQUES ET DES THERMOPOMPES

Fulltext Availability:
Claims

Claim
... valve 12, from where it passes into the evaporator 8. The valve 12 controls the flow of the refrigerant and oil mixture to the evaporator 8 in accordance with the temperature prevailing downstream of the evaporator...The system will thus reach a state of balance. It may be necessary to deliver heat to the sensors associated with the expansion valve 4, in order to ensure that the valve is fully...

9/AZ,TI,KWIC/175 (Item 175 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00326196
SOLVENT EXTRACTION OF OIL FROM OIL BEARING MATERIALS
EXTRACTION PAR SOLVENT DE L'HUILE CONTENUE DANS DES MATERIAUX

Fulltext Availability:
Claims

Claim

... preferably from about 700F to 1200F, most preferably from about 700F to about 1100P.

For heat sensitive material such as dried egg yolks it is preferred thalt the temperature be 600-900P...the valve remains open would be sufficient to permit at least some of the extracted oil and propane to flow through the bottom filter in the reaction vessel and into the separation zone. The extracted...

9/AZ,TI,KWIC/176 (Item 176 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00312532
APPARATUS AND METHOD FOR RECLAIMING USEFUL OIL PRODUCTS FROM WASTE OIL
APPAREIL ET PROCEDE DE RECUPERATION DE PRODUITS PETROLIERS PROVENANT D'HUILE USAGEE

Fulltext Availability:
Claims

Claim
... by connection pipes, and baffles are provided in the connection pipes to substantially reduce convective flow of waste oil and he" transfer between the service tank, float tank and evaporation chamber.

14. An apparatus...24. An apparatus as claimed in claim 23, which includes a bake timer, a temperature sensor on the heat exchanger connected to the bake timer, and with the bake override switch being connected to...evaporation chamber by connection pipes, and baffles within the connection pipes, to substantially reduce convective flow of waste oil .

30. A method of reclaiming a useful oil product from a waste oil, the method...

9/AZ,TI,KWIC/177 (Item 177 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00233848
PHYSICAL PROCESS FOR SIMULTANEOUS DEODORIZATION AND CHOLESTEROL REDUCTION OF FATS AND OILS
PROCEDE PHYSIQUE DE DESODORISATION ET DE REDUCTION SIMULTANEES DU CHOLESTEROL CONTENU DANS DES GRAISSES ET DES HUILES

Fulltext Availability:
Claims

Claim
... dry spots on the disc surface are prevented, and the ease and efficiency of handling heat -sensitive materials is enhanced. The placing of the heat exchange fluid in an indirect heat exchange relationship primarily with the thin-film phase of...of the pre-evaporator 25, while still at 1.5 mmHg pressure.

Next the fish oil /steam mixture flowed into the disengaging chamber or vapor head 16, where the vapor phase was flash vaporized...

9/AZ,TI,KWIC/178 (Item 178 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00231676
CONTINUOUS HYDROGENATION OF UNSATURATED OILS
HYDROGENATION CONTINUE D'HUILES INSATUREES

Fulltext Availability:
Claims

Claim
... involves taking a small grab sample of the processing oil and refluxing it through a heat exchanger to make the opacity and tem perature measurements both down through and back up through its crystallization zone. This method develops two smooth...hydrogen to go into solution.

Since the present invention involves the continuous hydrogenation of edible oils , all ancillary flows are likewise continuous so that reactant mixtures are uni form and equally distributed during the...flow out; (2) temperature gradient on the oil up the hydrogenator column; and (3) total heat leaving the system from each hydrogenator vessel. These three measurements provide adjustment information for the operator. The hydrogenation process is exothermic, and for uniformity of...

...the temperature differential of the coolant in and out of the hydrogenator vessel can be measured against the flow of the coolant; this heat removal measurement can be recorded and maintained at a uniform rate. Likewise, the temperature gradient of the...oil stream.

22 is a heat exchanger.

24 is an outlet stream of finished product oil which flows in heat exchange relationship to the inlet oil stream 20 in the heat exchanger 22 ...the present invention pro vides for the continuous sampling and analyzing of extremely small side flows of the processing oil . This is achieved by the following:

116 is a continuous oil quality monitor station which...disposed clearance aperture through which the support shaft 104 extends, and through which rising processing oil travels to flow into the tray volume above each stationary tray 132.

In like manner, each of the...the blades 146 is to cause such blades to impart a vertical velocity to the flowing pro cessing oil and catalyst mixture to break up stratifica tion that occurs as a phenomenon in all...

...will not be necessary. The stator blades 156 are also angularly disposed to impact the flowing processing oil /catalyst mixture with a ver tical velocity for the reason discussed above.

The agitator members...of hydrogen spargers which

- sparge the hydrogen received from the inlet hydrogen conduits into the oil flow and are disposed at intervals in the hydrogenator vessel 72 at the underside of selected...

...nozzle assembly having a plurality of diffusing apertures for dispersion of hydrogen gas into the flowing oil . As discussed above, this sparger will disperse the bulk of the hydro gen reacted, but... configuration described above which is so established to effect hydro gen distribution uniformly in the oil flowing near and through the center openings of the stationary trays 132 It as the oil flowing

therethrough rises about the center support shaft 104 of the hydrogenator vessels 72. Also, the...176B and 178B, respectively, are all closed. In the calibration mode, a quantity of unhydrogenated oil from the flow ahead of the initial hydrogenator vessel 72 is fed to the quality monitor station 116...control line of the tem perature controlled diaphragm valves 210A is connected to the thermocouple measuring T1 so that the amount of coolant admitted to the heat exchanger 208A is A controlled to achieve a predetermined temperature of oil passing to the...

...range. Thus, the interstice device 212A, disposed as described, will permit a known quantity of flowing oil therethrough at a measured temperature.

Each of the other interstice devices shown in Figure 8...

...in the interstice devices 212B through 212E will be the pressure and temperature of the flowing oil sample, as follows.

The diaphragm valve 210B is controlled by the ther mocouple measuring T3 of interstice device 212B, the outlet temperature of the heat exchanger 208B will be T4, and the pressure at opposing ends of the interstice 212B will be P3 and P4. The diaphragm valve 210C is controlled by the thermo-couple measuring T5 of interstice device 212C, the outlet temperature of the heat exchanger 208C will be T6, and the pressure at opposing ends of the interstice 212C will be P5 and P6.
The diaphragm valve 210D is controlled by the thermo couple measuring T7 of interstice device 212D, the outlet temperature of heat exchanger 208D will be T8, and the pressure at opposing ends of the interstice 212D will be P7 and P8. The diaphragm valve 210E is con trolled by the thermocouple measuring T9 of interstice device 212E, the outlet temperature of the heat exchanger 208E will be T10 and the pressure at opposing ends of the interstice 212E...structure and control circuitry need not be provided herein.

226 designates a plurality of opacity measurement members interdisposed between the heat exchangers 222 and the electrical heaters 224 as shown, the opacity measurement members being in...

...10, these components are disposed such that the oil sampled passes serially through the opacity measurement members 226A - 226M after being selectively cooled/heated by the heat exchangers 222A - 222G and the electrical heaters 224A 224F, which are disposed to progressively cool and then heat the flowing oil as the oil moves down this line of opacity measurement members 226.

Each of the opacity measurement members...red radiation in the flowing fluid as it is progressivel, 1-Y cooled by the heat exchangers 222A through 222G, this attenuation being a measure of the increase in opacity in the fluid as the partially hydrogenated oil passes through... heaters 224A - 224F) to match. In other words, a cooling profile is effected by the heat exchangers 222A 222G, and opacity measurements of the flowing fluid are made at specific temperature points therealong; then, this cooling profile...

...amount of hydro gen sparged into the fluid via the spargers 162; the rate of oil flow to the hydrogenator vessel 72 and the fluid velocities generated therein; the temperature of the...plasticity levels of the particular oil being hydrogenated.- The inlet oil (that is, the sample oil) is caused to also flow through valve 160A (valve"160D being closed), conduit,178, flow meter 184, pump 186, conduit...

...return line 120. As the oil sample is passed sequentially through each

of the opacity measurement members 226A through 226G, the sample is cooled via the heat exchangers 222A through 222G. Following passaqe through the opacity measurement member 226G, the oil sample is sequentially heated via the electrical heaters 224A through 224F... opacity measurement members 226A through 226F. That is, temperature controller 240F measures T16 at opacity measurement member 226F and controls the electrical heater 224A to sufficiently heat the sample oil that the temperature of the sample in the opacity measureTent member 226H ...

...Figures 9 and 9A is generated by the oil quality monitor station 116 on processing oil flowing to and returning from the oil quality monitor 116 via conduits 122, 124 which com munciate with the effluent oil and...curves on the computer CRT to make changes in the reaction parameters (such as, hydrogen flow rate, temperature and pressure levels, oil flow rates, catalyst strength, etc.) to maintain the effluent quality within a predetermined range of accept...sample in the copper coils and using water on the shell side. Downstream from the heat exchanger was a viscosity measurement device which was an aluminum bar into which an interstice was shrink fitted. The interstice...

...consisted of an infra-red emitter and infra-red receiver. These were placed across the flow of oil in a machining which also contained another thermocouple. The piping arrangement allowed for the oil flow to by-pass the interstice for opacity only measurements. ...all of the catalyst as filtrate upon the internal surfaces of the filter tubes. The oil flow passes from the shell of filter 284 via conduit 310, pump 288 and conduit 312...

...tubes for thorough cleaning during regeneration of the filter apparatus 284. The recycled shell side oil flow effected via conduit 302, pump 292 and conduit 304B serves to clear the shell side...portion of the processing oil stream through a plurality of calibrated interstices at a predetermined flow rate; (b) cooling the oil stream portion to a predetermined and discrete temperature between each of the calibrated interstices; (c...22 wherein the hydrogena tion reaction of the oil is carried out in a continuously flowing process in which the processing oil and suspended granular catalyst are passed serially through a plurality of hydrogenation vessels, each such...

...passage respectively at the column wall and at the support shaft so that the edible oil stream is caused to flow upwardly in the hydrogenator vessel so as to pass between the shelf trays and the...50 wherein the hydrogena tion reaction of the oil is carried out in a continuously flowing process in which the processing oil and suspended granular catalyst ...respectively at PP the column wall and at the support shaft-so that the edible oil stream is caused to flow upwardly in the hydrogenator vessel so as to pass between the shelf trays and the...

...inlet and outlet ports; and means for measuring the temperature and pressure differentials of the oil flowing through the interstice bore.

57. The method of claim 56 wherein each of the opacity...frequency radiation along the radiation path and for measuring the attenuation of same by the oil flowing through the longitudinal bore.

tu
r

AMENDED CLAIMS
[received bv the International Bureau on 25...

...wherein the hydrogena tion reaction of the processing oil is carried out in a continuously flowing process in which the processing oil and suspended granular catalyst mixture is passed serially through a plurality of hydrogenation vessels, each...

9/AZ,TI,KWIC/179 (Item 179 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00210712
WATER/OIL RATIO MEASURING APPARATUS
APPAREIL DE MESURE DU RAPPORT EAU/HUILE

Fulltext Availability:
Claims

English Abstract
Apparatus for determining the proportion of water in an oil and water mixture flowing in a pipeline (22). An inner probe member (26) is provided within an outer tube...

...and generates at its output (61, 62) a digital signal representative of the water to oil ratio of the mixture flowing in the pipeline (22). Means (80, 100) for converting the digital output signal to an...

Claim
CLAIMS 1. Apparatus for determining the proportion of water in an oil and water mixture flowing in a pipe line characterized by comprising, sensor means (20) having an outer tube (24...

...26) and the outer tube (24) nonlinearly related to the proportion of water in an oil and water mixture flowing in the pipeline (22), an oscillator circuit means (40), the input terminals of which (28...

...to the memory means for generating a digital signal representa tive of the water to oil ratio of the mixture flowing in the pipeline.

2. The apparatus of claim 1, characterized by monitoring means (80-100...

...water to oil ratio digital signal for generating a visual indication of the water to oil and water mixture flowing U R OUP - I W1 in the pipeline (22).

3. The apparatus of claim 2...

...100) responsive to the analog water to oil ratio signal for indicating the water to oil ratio of the mixture flowing in the pipeline (22).

4. The apparatus of claim 1 or 2, char acterized in that the oscillator circuit means (40) is temperature compensated by a thermistor circuit whereby the oscillating signal output from the os cillator circuit means (40) is not...to the count signal to generate the digital signal representa ,tion of the water to oil ratio of the mixture flow ing in the pipeline (22).

-F
oM -1

- ~0111~

9/AZ,TI,KWIC/180 (Item 180 from file: 349)

DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00206716
A DEVICE FOR THE IMPROVING OF THE STARTING OF AN ENGINE
DISPOSITIF POUR L'AMELIORATION DU DEMARRAGE D'UN MOTEUR

Fulltext Availability:
Claims

Claim
... the above-mentioned embodyment of the inven tion, with one or more electrical resistors and heat insulation. This measure may be necessary for large heavy duty machines equipped with diesel engines.

The amount of...the oil filter there is a cylindrical filter cartridge 52, through which the lubrica ting oil flows , while the engine is running, in the manner shown by arrows A in figure 2...ducts the conduits 131, 132t 133 and 134 pass parallel with the jacket 8. The flow through channel of the oil thus comprises the intermediate ducts 15 and 17 and the annular duct 160. There are...

...aO TIO center 141, close to the rim 142, through which a part of the oil also can flow .
The two electrical resistors 18, 19 are installed in contact with the floor guide 14...part 201 can be equipped with cooling flanges 202.

It must be noticed that the flow of oil through the device 7 can be arranged in one direction only. Thus, for example, if sleeve are appropriate ly equipped with orifices 162 so that the oil can flow in direction C through the chamber 10.

The device in figure 4 functions in the...

9/AZ,TI,KWIC/181 (Item 181 from file: 349)
DIALOG(R)File 349:(c) 2001 WIPO/MicroPat. All rts. reserv.

00206515
OIL COMBUSTION SYSTEM
SYSTEME DE COMBUSTION D'HUILE

Fulltext Availability:
Claims

Claim
... means disposed between said high pressure input and said low pressure output for obstructing the flow of oil therebetween and thereby reducing the pressure of the oil presented at the low pressure output...

...oil pressure at the high pressure input.

3. The system of Claim 2 wherein an oil flow path is formed between said high pressure input and said high pressure output and said...

...least parti ally within said flow path.

4. The system of Claim 3 wherein an oil flow path is formed between said high pressure input and said high pressure output and said...
...A T Dldt~ 20.

mounted in said low pressure output and extending therefrom into said oil flow path; and a slot formed longitudinally in said cylinder and

being disposed in said oil flow path in an orientation facing the high pressure output.

5. The system of Claim 1...

...time.

6. The system of Claim 1 further comprising a posi tive temperature co-efficient thermistor attached to said siphon nozzle means for heating the oil prior to burning it.

7...of Claim 7 wherein said means for heat ing comprises a positive temperature co-efficient thermistor mounted on said block adjacent said oil retention chamber.

10. The system of Claim 7...means comprises a cylinder mounted in said low pressure output and extending therefrom into said oil flow path; and a slot formed longitudinally in said cylinder and being disposed in said Oil flow path in an orientation facing the high pressure output.

18. A siphon nozzle head for...

FILES SEARCHED:

```
  File   9:Business & Industry(R)  Jul/1994-2001/Jun 25
         (c) 2001 Resp. DB Svcs.
  File  15:ABI/Inform(R)  1971-2001/Jun 23
         (c) 2001 ProQuest Info&Learning
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  File  18:Gale Group F&S Index(R)  1988-2001/Jun 25
         (c) 2001 The Gale Group
  File  20:World Reporter  1997-2001/Jun 26
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*File  20: Duplicate Detection is currently not working in file 20
  File 148:Gale Group Trade & Industry DB  1976-2001/Jun 25
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         (c) 1999 The Gale Group
  File 256:SoftBase:Reviews,Companies&Prods.  85-2001/May
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*File 256: Please note new price changes effective May 1, 2001.
See Help Rates256 for details.
  File 275:Gale Group Computer DB(TM)  1983-2001/Jun 25
         (c) 2001 The Gale Group
  File 481:DELPHES Eur Bus  95-2001/Jun W4
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*File 481: This file has resumed updating.
  File 583:Gale Group Globalbase(TM)  1986-2001/Jun 26
         (c) 2001 The Gale Group
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         (c) 2001 The Gale Group
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         (c) 2001 McGraw-Hill Co. Inc
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         (c) 2001 ProQuest Info&Learning
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         (c) 2001 The Dialog Corp.
  File   2:INSPEC  1969-2001/Jun W4
         (c) 2001 Institution of Electrical Engineers
  File   6:NTIS  1964-2001/Jul W2
         Comp&distr  2000 NTIS, Intl Cpyrght All Right
*File   6: See HELP CODES6 for a short list of the Subject Heading Codes
(SC=, SH=) used in NTIS.
  File   8:Ei Compendex(R)  1970-2001/Jun W4
         (c) 2001 Engineering Info. Inc.
*File   8: New price changes effective May 1, 2001.See Help Rates8.
Truncate CC codes for complete retrieval.UDs were adjusted.
  File  14:Mechanical Engineering Abs  1973-2001/May
         (c) 2001 Cambridge Sci Abs
  File  31:World Surface Coatings Abs  1976-2001/Jun
         (c) 2001 Paint Research Assn.
*File  31: There is no data missing. UDs have been adjusted to reflect
the current months data. See Help News31 for details.
  File  32:METADEX(R)  1966-2001/Aug B2
         (c) 2001 Cambridge Scientific Abs
```

*File 32: See Help Codes32 for a list of the Alloy Class Codes(CC=)
and Alloy Class Names(CN=) used in Metadex.
File 33:Aluminium Ind Abs 1968-2001/Jul
(c) 2001 Cambridge Scientific Abs
File 34:SciSearch(R) Cited Ref Sci 1990-2001/Jun W4
(c) 2001 Inst for Sci Info
File 35:Dissertation Abs Online 1861-2001/Jul
(c) 2001 ProQuest Info&Learning
File 63:Transport Res(TRIS) 1970-2001/May
(c) fmt only 2001 Dialog Corp.
File 65:Inside Conferences 1993-2001/Jun W2
(c) 2001 BLDSC all rts. reserv.
*File 65: CD=2000 and CY=2000 are not fully functioning.
Please see Help News65 for details.
File 87:TULSA (Petroleum Abs) 1965-2001/Jun W4
(c)2001 The University of Tulsa
File 94:JICST-EPlus 1985-2001/Jun W1
(c)2001 Japan Science and Tech Corp(JST)
*File 94: There is no data missing. UDs have been adjusted to reflect
the current months data. See Help News94 for details.
File 96:FLUIDEX 1972-2001/Jun
(c) 2001 Elsevier Science Ltd.
*File 96: Please note new price changes effective February 1, 2001.
See Help Rates96 for details.
File 99:Wilson Appl. Sci & Tech Abs 1983-2001/May
(c) 2001 The HW Wilson Co.
File 103:Energy SciTec 1974-2001/Jun B1
(c) 2001 Contains copyrighted material
*File 103: For updates please see Help News103.
For access restrictions, see HELP RESTRICT.
File 108:AEROSPACE DATABASE 1962-2001/JUN
(c) 2001 AIAA
*File 108: For update information please see Help News108.
File 118:ICONDA-Intl Construction 1976-2001/Jun
(c) 2001 Fraunhofer-IRB
File 144:Pascal 1973-2001/Jun W4
(c) 2001 INIST/CNRS
File 238:Abs. in New Tech & Eng. 1981-2001/May
(c) 2001 Reed-Elsevier (UK) Ltd.
File 239:Mathsci 1940-2001/Jul
(c) 2001 American Mathematical Society
File 240:PAPERCHEM 1967-2001/Jun W1
(c) 2001 IPST
File 248:PIRA 1975-2001Jul W2
(c) 2001 Pira International
File 293:Eng Materials Abs(R) 1986-2001/Jul
(c) 2001 Cambridge Scientific Abs
File 315:ChemEng & Biotec Abs 1970-2001/May
(c) 2001 DECHEMA
File 323:RAPRA Rubber & Plastics 1972-2001/Jul
(c) 2001 RAPRA Technology Ltd
File 335:Ceramic Abstracts 1976-2001/Q2
(c) 2001 Cambridge Scientific Abs.
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
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File 111:TGG Natl.Newspaper Index(SM) 1979-2001/Jun 25
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File 278:Microcomputer Software Guide 2001/Jun

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File 608:KR/T Bus.News. 1992-2001/Jun 26
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File 92:IHS Intl.Stds.& Specs. 1999/Nov
(c) 1999 Information Handling Services
*File 92: Due to IP format changes the file will not update for several months.
File 202:Information Science Abs. 1966-2001/ISSUE 04
(c) Information Today, Inc
*File 202: The file now includes e-journals. For more information see Help News202.
File 241:Elec. Power DB 1972-1999Jan
(c) 1999 Electric Power Research Inst.Inc
*File 241: This file is closed (no updates)
File 420:UnCover 1988-2001/May 31
(c) 2001 The UnCover Company
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File 266:FEDRIP 2001/Jun
Comp & dist by NTIS, Intl Copyright All Rights Res
File 80:TGG Aerospace/Def.Mkts(R) 1986-2001/Jun 25
(c) 2001 The Gale Group
File 109:Nuclear Sci. Abs. 1948-1976
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*File 109: For access restrictions, see HELP RESTRIC1.
File 440:Current Contents Search(R) 1990-2001/Jul W1
(c) 2001 Inst for Sci Info

TITLES AND KWIC OF PUBLICATIONS CONTAINING THE KEYWORDS "FLOW?(5N)OIL? ? AND (THERMISTOR? OR HEAT? ?(5N)(SENS? OR MEAS? OR DETECT?))"

7/6,KWIC/1 (Item 1 from file: 9)
DIALOG(R)File 9:(c) 2001 Resp. DB Svcs. All rts. reserv.

03140485 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Application of SAGD, related processes growing in Canada
May 14, 2001
WORD COUNT: 3382

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
...the initial reservoir temperature (7(degrees) C.). A total of 38.5% of the injected heat returns as sensible heat in the oil and water product. As the pressure falls in the production well, water flashes and sensible heat is transferred to latent heat . The recovery of the heat from the produced fluids is very important in achieving thermal efficiency in an SAGD project.

About one quarter of the injected heat remains as sensible heat within the steam chamber. In general the heat remaining within the steam chamber per unit...

...the chamber pressure is greater than that of the bottom water aquifer, there is a flow of water and some oil outwards from the recovery region into the aquifer. This outward flow may be small since...

7/6,KWIC/2 (Item 2 from file: 9)

DIALOG(R)File 9:(c) 2001 Resp. DB Svcs. All rts. reserv.

01545707 (USE FORMAT 7 OR 9 FOR FULLTEXT)
It's only natural
June 22, 1996
WORD COUNT: 1427

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
...controlled conditions.

The liquor containing the extractives is then drawn off and the solvent removed. Heat -sensitive materials are evaporated under reduced pressure. Soft extracts of plants, such as seaweed, quassia and...

...be small. Care is needed as they are expensive. It takes about 100kg of lavender flowers to produce a litre of oil .

Many of Ransom's liquid products contain alcohol and, until recently, duty had to be...

7/6,KWIC/3 (Item 1 from file: 15)
DIALOG(R)File 15:(c) 2001 ProQuest Info&Learning. All rts. reserv.

02167432 73119892
USE FORMAT 9 FOR FULL TEXT
Special report: Future of EOR & IOR--Application of SAGD, related processes growing in Canada
May 14, 2001 LENGTH: 4 Pages
WORD COUNT: 3539

...TEXT: equal to the initial reservoir temperature (7degC.). A total of 38.5% of the injected heat returns as sensible heat in the oil and water product. As the pressure falls in the production well, water flashes and sensible heat is transferred to latent heat . The recovery of the heat from the produced fluids is very important in achieving thermal efficiency in an SAGD project.

About one quarter of the injected heat remains as sensible heat within the steam chamber. In general the heat remaining within the steam chamber per unit...

... the chamber pressure is greater than that of the bottom water aquifer, there is a flow of water and some oil outwards from the recovery region into the aquifer. This outward flow may be small since...

7/6,KWIC/4 (Item 2 from file: 15)
DIALOG(R)File 15:(c) 2001 ProQuest Info&Learning. All rts. reserv.

02057410 58965088
USE FORMAT 9 FOR FULL TEXT
How to service thermal expansion valves
Aug 21, 2000 LENGTH: 1 Pages
WORD COUNT: 672

...TEXT: heat load (latent heat).

- Between C and D, the vapor temperature increases dramatically as further heat load is applied (sensible heat). At this point, the gas is

superheated above its saturation temperature.

- At D, the suction...

...put the bulb at 6 o'clock because it may sense the temperature of the oil flowing through the pipe, rather than the temperature of the refrigerant.

Finally, be sure the bulb...

7/6,KWIC/5 (Item 3 from file: 15)

01748646 03-99636
USE FORMAT 9 FOR FULL TEXT
Designing for plant fire protection
Nov 1998 LENGTH: 4 Pages
WORD COUNT: 2115

...TEXT: fire; therefore, sprinkler protection needs to be provided over all areas that are subject to oil flow , accumulation or spray. Where containment is impractical, a foam-water sprinkler system should be considered... Only deluge systems are adequate for crossflow towers due to the differences in placement of heat detectors and sprinklers inside the tower. Vibration monitoring with a fan interlock to trip the fan...

7/6,KWIC/6 (Item 4 from file: 15)

01551644 02-02633
USE FORMAT 9 FOR FULL TEXT
New presulfurized catalyst reduces exotherm potential in hydrocrackers
Jan 5, 1998 LENGTH: 5 Pages
WORD COUNT: 2331

...TEXT: agent, sour gas, or feedstock.

(Chart Omitted)

Captioned as: Fig. 1

In general, liquidphase sulfidings (oil and hydrogen flow) are preferred because the oil acts as a heat sink for the sulfiding exotherm and helps distribute the sulfur evenly...24, 1992, p. 49). These data were generated by a differential scanning calorimeter (DSC), which measures the rate of heat release (i.e., temperature rise) as the presulfurized catalyst samples are heated in a hydrogen...

...hydrocracker start-up
The hydrocracker at Citgo's refinery in Lake Charles is a series flow unit with oil recycle. Fig. 6 shows a schematic of the unit. The unit has one pretreat reactor...

7/6,KWIC/7 (Item 5 from file: 15)

01196921 98-46316
USE FORMAT 9 FOR FULL TEXT
Gates thermoplastic clamp offers maintenance-free hose connection

Mar 1996 LENGTH: [redacted]ages
WORD COUNT: 415

...TEXT: of thermoplastic, shrinks to conform to any shape of hose and housing.

Made of a heat -sensitive material, Gates new PowerGrip(TM) SB clamp solves coolant leakage problems in both silicone and...

... cleaning system from T.F. Hudgins, Inc. The new system combines a powerful Spinner II oil cleaning centrifuge with a full-flow , spin-on cleanable screen. The system removes both large debris and fine, abrasive particles, reducing...

7/6,KWIC/8 (Item 6 from file: 15)

01113697 97-63091
USE FORMAT 9 FOR FULL TEXT
Safety products for the metal industry
1995 LENGTH: 13 Pages
WORD COUNT: 9115

...TEXT: rubber palm coating. The open-back design provides comfort and breathability.

DRAIN COVER SEALS GRAVITY FLOW

The Oil -Dri Drain Cover from the Industrial and Environmental Products Division of Oil-Dri of America...a sometimes potentially dangerous job.

FLASHBACK ARRESTERS PROTECT OPERATORS

Gas-Arc Welding Supplies, Ltd.'s heat sensitive flashback arresters are designed to improve safety by protecting the operator, regulators and gas supply...

7/6,KWIC/9 (Item 7 from file: 15)

01091879 97-41273
USE FORMAT 9 FOR FULL TEXT
Policing waterways for hydrocarbons
1995 LENGTH: 3 Pages
WORD COUNT: 1522

...TEXT: require quite different sensing techniques, the first to measure physical parameters, the latter chemical.

Visible oil -on-water

As water flows past a fixed point, carried by currents, winds or deflecting booms, the instrument projects a...

... Slickwatch is set at the slowest level to enable it to ignore small quantities of oil . The water flow directly below the instrument is consistently at least several feet per second. Only a major...

...oil constantly passing over the spillway, will cause an alarm.

High sensitivity monitoring
A Slickwatch detector monitors a heat exchanger. The saltwater which is pumped in to cool the petroleum products in the heat...

7/6,KWIC/10 (Item 8 from file: 15)

00923035 95-72427
USE FORMAT 9 FOR FULL TEXT
New presulfiding technique proves successful in commercial trials
Oct 10, 1994 LENGTH: 6 Pages
WORD COUNT: 2325

...ABSTRACT: nature of the activation process. To resolve this weakness, CRI utilized differential scanning calorimetry, which measures precisely the heat released from chemical reactions. ...
...TEXT: agent is injected. This typically requires 8-12 hr if the unit is operating on oil flow , but it can take 2-3 days if there is only gas flow.

Once the...

...catalyst.

Fig. 2 illustrates a fairly typical activation for presulfided catalyst in a unit under oil flow . (Fig. 2 omitted) The data for the figure were taken from a gas oil desulfurization...

... with about 160,000 lb of Criterion 424 catalyst presulfurized by the elemental sulfur process. Oil and gas flow were established, and the reactor temperature was increased.

Fig. 2 also shows that, when the...

... rapidly. The temperature increase at the bottom thermocouples was about 100-350deg F., even with oil flow through the unit.

Once the exotherm has passed through a reactor, the unit temperature typically...

...program in the late 1980s. Two deficiencies had to be overcome:

*Excess sulfur removal under oil flow

*Large exotherms caused by rapid activation.

After spending 3 yr and $1+ million, CRI's...of the activation process. To resolve this weakness, CRI utilized differential scanning calorimetry (DSC), which measures precisely the heat released from chemical reactions.

As shown in Fig. 4, a sample is placed in a...

... are of prime interest. Hydrocracking catalysts are normally activated with H sub 2 S in flowing hydrogen. Oil circulation is used rarely because of concerns with uncontrolled hydrocracking reactions. As a consequence, several...

... commercial application of actiCAT-processed catalysts in a hydrocracker took place in 1993. Activation without oil flow occurred in a highly controlled fashion, with exotherms never exceeding 25deg F. through any

catalyst...

7/6,KWIC/11 (Item 9 from file: 15)
DIALOG(R)File 15:(c) 2001 ProQuest Info&Learning. All rts. reserv.

00889971 95-39363
USE FORMAT 9 FOR FULL TEXT
Fluids, conductors, and conditioners
Jun 1994 LENGTH: 17 Pages
WORD COUNT: 15063

...TEXT: index additives perform well in industrial service.

Pour point is the lowest temperature at which oil flows when chilled under specified test conditions. It is important if the system is regularly exposed...located so that collected dirt on the filter element is not swept downstream by the flow of oil passing through the valve.

Differential pressure indicators are options on nearly all filter housings; they...a recirculating flow lubricator. And pulse lubricators are available for still more difficult applications.

Direct-flow lubricators spray a mist of oil directly into the air line. They are inexpensive, and can adequately lubricate most pneumatic systems ...
... exceed about 25 ft in length, and include no sections where air must rise vertically. Oil particles emitted from direct-flow lubricators have diameters ranging from 0.4 muin. to 0.02 in. About 96 to...cooling circuit from a reservoir to the heat exchanger may be used to circulate the oil independent of changing flows in the main circuit.

For systems that are to be used outside, a system bypass...to the lower wall. Flow oscillation is a linear function of flow rate. A heated thermistor placed in the upper feedback passage measures oscillation rate, and hence flow.

Jet-deflection meters...

7/6,KWIC/12 (Item 10 from file: 15)
DIALOG(R)File 15:(c) 2001 ProQuest Info&Learning. All rts. reserv.

00809490 94-58882
USE FORMAT 9 FOR FULL TEXT
Out of the frying pan, into the fryer
Jan 15, 1994 LENGTH: 1 Pages
WORD COUNT: 495

...TEXT: the team needed to understand the dynamics of frying, so it built grids of thermocouple heat sensors to map the temperature and flow of the hot oil as it circulated around the vats in which the McNuggets and french-fries acquire their...

7/6,KWIC/13 (Item 11 from file: 15)
DIALOG(R)File 15:(c) 2001 ProQuest Info&Learning. All rts. reserv.

00641324 92-56264
USE FORMAT 9 FOR FULL TEXT
Simple Methods Solve Vacuum Column Problems Using Plant Data
Sep 14, 1992 LENGTH: 6 Pages

WORD COUNT: 3010

...TEXT: estimate the flash-zone vapor rate, assume the overflash rate is 75% of the wash oil flow rate.)

Table 1 presents the material balance and selected heat balance data for the column... result from the proposed revamp modifications. The data evaluation revealed inconsistencies in the column's measured heat and material balance.

The data shown in Fig. 8 indicated an HVGO pumparound duty of...

... the consistency of the measured wash oil rate and the calculated rate. The measured wash oil flow rate was 139,194 lb/hr. Using Equation 4 (Fig. 8), the calculated wash rate...

7/6,KWIC/14 (Item 1 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08654140 Supplier Number: 74925623 (USE FORMAT 7 FOR FULLTEXT)
TRADEMARKS.
March, 2001
Word Count: 5455

... Societe Electrothermique de la Tour-de-Treme

Saturn - Minor surgery
Derungs Licht AG

Secu-Rex - Heat toughened glass
Verres Industriels SA

Senso -Rex - Alarm glass
Verres Industriels SA

SPECTROSIL - Quartz synthetique
Societe Electrothermique de la Tour-de...Ltd

Portn
Monax Glass Ltd

POWERLINE - Powered roller conveyor
Gramac Mechanical Handling Systems Ltd

Precon - Oil flow control
Laidlaw Drew Ltd

Pro-Tex - Cut resistant gloves
Bennett Safetywear Ltd

PROFILE - Lehr loader...

7/6,KWIC/15 (Item 2 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08651812 Supplier Number: 74887007 (USE FORMAT 7 FOR FULLTEXT)
Application of SAGD, related processes growing in Canada.
May 14, 2001
Word Count: 3641

... the initial reservoir temperature (7(degrees) C.). A total of 38.5% of the injected heat returns as sensible heat in the oil and water product. As the pressure falls in the production well, water flashes and sensible heat is transferred to latent heat . The recovery of the heat from the produced fluids is very important in achieving thermal efficiency in an SAGD project.

About one quarter of the injected heat remains as sensible heat within the steam chamber. In general the heat remaining within the steam chamber per unit...

...the chamber pressure is greater than that of the bottom water aquifer, there is a flow of water and some oil outwards from the recovery region into the aquifer. This outward flow may be small since...

7/6,KWIC/16 (Item 3 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08587736 Supplier Number: 63986944 (USE FORMAT 7 FOR FULLTEXT)
Capabilities Guide 2000.
July, 2000
Word Count: 16813

... of a fully automated centrally located software package that manages an entire fleet of Gasurveyors, Heath 's multi-function gas detectors . The IMS operates by maintaining files, which contain a complete record of instrument calibration and...2" through 12" line pipe size.

ThermoSync RTD Probe

* Model ATP-1000: 4-wire RTD sensor with heat insulating PVC protection tube to block thermal transfer.

* Length 12" and greater.

Circle #129

Introducing...material due to its wide availability, low cost and proven performance. However, there are many flowline applications in the oil industry where steel cannot be used due to corrosion problems, in particular, where the transported...

7/6,KWIC/17 (Item 4 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08481768 Supplier Number: 72658806 (USE FORMAT 7 FOR FULLTEXT)
Rocker covers help to keep the noise down.
April, 2001
Word Count: 479

... claims. Other benefits include high resistance to chemicals and heat (it is effective against hot oil), good melt-flow characteristics and good weld-line strength.

During the joint development of the rocker cover, Rhodia...

...series mould. Additional services, supplied by Rhodia's laboratories in Freiburg, Germany, included tests and measurements for heat -ageing resistance, temperature shock and leakage.

The lightweight Series 2013 engines are designed for goods...

7/6,KWIC/18 (Item 5 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08369544 Supplier Number: 70907794 (USE FORMAT 7 FOR FULLTEXT)

FATS/SUBSTITUTES: Butter Substitute Melts Like Original.(ConAgra Inc.)(Brief Article)
Feb, 2001
Word Count: 640

... agent such as gelatin or agar or maltodextrin to thicken water phases in water-in-oil emulsions and prevent them from flowing until melt occurs in the mouth. However, melting on hot toast or the like will...

...formulating their version. In one phase, they mixed pectin with calcium salt to form a heat -stable gel particles with organoleptic sensation similar to fat. The flowable fat mimetic is combined with a second, continuous outer phase...

7/6,KWIC/19 (Item 6 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08361430 Supplier Number: 70872511 (USE FORMAT 7 FOR FULLTEXT)
Choose the Right Flowmeter.
Jan, 2001
Word Count: 6050

... Potable water
* Cooling water
* Makeup water
* Hot and chilled water
* Custody transfer
* Water injection
* Crude-oil flow
* Mining slurries
* Acids
* Caustics
* Liquefied gases
The transit-time flowmeter
Design overview: Like its Doppler...bodies is placed within the fluid stream. Just behind the bluff body, a pressure transducer, thermistor , or ultrasonic sensor picks up the high and low pressure and velocity fluctuations as the...

7/6,KWIC/20 (Item 7 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

08287470 Supplier Number: 64979628 (USE FORMAT 7 FOR FULLTEXT)
What's New In Leak Detection, Monitoring And Inspection.
August, 2000
Word Count: 2090

... includes multifunctional gas indicators for combustible gases, flame ionization detectors, odorant analysis equipment, mobile leak detectors and more. Recently, Heath introduced the IMS gas detector software for Windows(R) that can manage an entire fleet of the company's multi...bi-di prover shown here. Information is offered on the company's liquid and gas flow metering systems for the oil and gas industry.
Circle #244
Ionics Agar Environmental
LEAKWISE(R), the computerized monitoring and data...

7/6,KWIC/21 (Item 8 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

07983311 Supplier Number: 61995668 (USE FORMAT 7 FOR FULLTEXT)
New Pipeline Insulation Technology Introduced.
April, 2000
Word Count: 1097

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...to shore, oil companies need to ensure temperatures stay within a critical range as the oil flows through those long pipes. To address these challenges more economically and efficiently than current solutions ...
... projects. A typical test involves circulating hot oil through a pipe covered with insulation while measuring heat loss under simulated deepwater conditions.
But rigorous testing standards are also needed after manufacturing to...

7/6,KWIC/22 (Item 9 from file: 16)

07837126 Supplier Number: 65378741 (USE FORMAT 7 FOR FULLTEXT)
E&P projects show positive benefit from recent innovations.
August, 2000
Word Count: 6958

... emissions of (NO.sub.x), CO and UHC are significantly reduced, and visible emissions and heat radiation are contained. The environmentally sensitive climate in which all oil companies now operate demands that emissions of all kinds be...of the technology, including flame distribution, gas/air ratios, ease of startup, effect of fluctuating flow , effect of liquids (oil /water) in the feed, and the resulting emissions and capacity In all, more than 100...

7/6,KWIC/23 (Item 10 from file: 16)

07678582 Supplier Number: 63925296 (USE FORMAT 7 FOR FULLTEXT)
AUTOMOTIVE TEMPERATURE SENSORS HAVE KEY APPLICATIONS IN EUROPE.(Brief Article)
August, 2000
Word Count: 1653

... in Europe, automotive suppliers are developing and providing sensors (such as pressure sensors, mass air flow sensors, and oil sensors) with an integrated temperature measurement capability. This trend toward embracing sensors that provide additional...

...attributed to other types of sensors.
A major type of automotive temperature sensor is the thermistor that provides an analog signal which must be interpreted by an electronic control unit in...

...Developpement segments automotive temperature sensors into two types: low-cost temperature sensors (e.g., NTC thermistors that are used in such applications as regulation of cabin temperature and measurement of external temperature); and high-cost thermistors (e.g., thermistors and Pt100 RTDs used in such applications as water temperature, oil temperature, and catalytic converter...

7/6,KWIC/24 (Item 11 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

07572707 Supplier Number: 63502067 (USE FORMAT 7 FOR FULLTEXT)
NEW PRODUCTS.
June, 2000
Word Count: 8359

... com
* Write in 152 or Reply Online
3-kW (CO.sub.2) Laser
* Fast-axial-flow design
* Low-speed, oil -free turbine
* New, compact version PRC Laser's redesigned STS 3000 3-kW (CO.sub
...with each socket providing electrical connections for laser drive current, photodiode feedback, TE cooler current, thermistor sensor signals, and case ground. Other features include fiber management spools nd interchangeable fiberoptic connectors...

7/6,KWIC/25 (Item 12 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

07478992 Supplier Number: 62728683 (USE FORMAT 7 FOR FULLTEXT)
SENSOR MARKETS AND TECHNOLOGIES UPDATE: HERAEUS SENSOR-NITE CATALYZES EXHAUST GAS TEMPERATURE SENSING.
June, 2000
Word Count: 3364

... thermocouple. Measurement error in the ECO-TS-200 is minimized, as a result of minimizing heat transfer from the sensor element to the sensor body (i.e., exhaust pipe).
Heat transfer issues can be a major source of measurement error at exhaust system temperatures above...

...well as electronic components, communication, and industrial plants. The company delivers more than one million sensors annually to major European heat meter producers.
Since PRTDs are able to detect minimum temperature differences, they are also used...

...sensors for measuring concentrations of hydrocarbons, NOx, and exhaust gas oxygen (lambda value); mass air flow sensors; oil temperature sensors; coolant water temperature sensors; and sensors for air conditioning (e.g., measuring external...air humidity in the car facilitates economically and ecologically optimized control and the avoidance of heat build-up.
Heraeus Sensor -Nite's thin-film platinum RTDs--which provide high long-term stability and reliability, and...

7/6,KWIC/26 (Item 13 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

06958068 Supplier Number: 58538560 (USE FORMAT 7 FOR FULLTEXT)
THERMAL JACKETS, SIZE LARGE.(Brief Article)
Dec, 1999
Word Count: 250

... than welding jackets onto the valves and pumps. It also avoids the risk of damaging heat -sensitive valve seating and seals.

A heating medium, which can be the in-house fluid--steam, water, water/glycol, or hot oils in liquid or vapor phase--flows through a pressure chamber embedded in the ControHeat jacket to provide heat to areas where...

7/6,KWIC/27 (Item 14 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

06536697 Supplier Number: 55346835 (USE FORMAT 7 FOR FULLTEXT)
FATS AND SUBSTITUTES: Butter Substitute Melts More Like Original.
July, 1999
Word Count: 587

... agent such as gelatin or agar or maltodextrin to thicken water phases in water-in-oil emulsions and prevent them from flowing until melt occurs in the mouth. However, melting on hot toast or the like will...

...formulating their version. In one phase, they mixed pectin with calcium salt to form a heat - stable gel particles with organoleptic sensation similar to fat. The flowable fat mimetic is combined with an second, continuous outer phase...

7/6,KWIC/28 (Item 15 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

06218680 Supplier Number: 54205812 (USE FORMAT 7 FOR FULLTEXT)
Advances in oil-free vacuum pumps.(European Technology)
March, 1999
Word Count: 1371

... a highly reliable, low-cost piston principle. Figure 1 shows a schematic of the gas flow of the new four-stage, oil -free pumps. The modular design allows the drive unit to be separate from the vacuum...

...depths of the pumping mechanism to the exterior body, thus providing easy cooling.
A further measure , which greatly limits heat generation, is to provide a pressure-sensitive bypass valve that limits the compression to only...

7/6,KWIC/29 (Item 16 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

06160054 Supplier Number: 53973043 (USE FORMAT 7 FOR FULLTEXT)
Avoid NGl plant machinery problems.(natural gas liquids)
Jan, 1999
Word Count: 5368

... replace the Joule Thompson expansion valve.
Mechanical refrigeration (propane) using centrifugal compressors. In a conventional sense , heat transfer at a rate of 12,000 Btu/hr is called one ton of refrigeration...injected into a port located between the expander and bearings. Part of the gas will flow to the lubricating oil and find its way to the reservoir. The gas is returned to the suction side ...

7/6,KWIC/30 (Item 17 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

06110944 Supplier Number: 53700968 (USE FORMAT 7 FOR FULLTEXT)
Manufacturers Alphabetic Listings.(Directory)
Jan 4, 1999
Word Count: 84481

... Mechler, Natl. Sales Mgr.
Water heating heat pumps and other energy conservation equipment; vertical, packaged heat pumps and air conditioners; pool htg. dehumidifiers; heat recovery ventilators.

Airxchange, Inc.
85 Longwater Dr., Rockland, MA 02370
(781) 871-4816 Fax: (781...5992
echerry@nh.ultranet:com
E. M. Cherry Jr., Pres.; J. C. Dempsey, V.P.
Heat exchangers, refrigerant to water, condensers, evaporators, and oil coolers; heat exchanger with built-in bi-directional receiver.

Aqua-Flo Inc.
6244 Frankford Ave., Baltimore, MD...
M. D. Drury, V.P.-Secy.; B. Statz,
Sales Mgr.; R. Kapinos, Eng. Mgr.
Temperature sensors and transmitters, humidity transmitters, pressure transmitters, air quality transmitters, AC/DC converters, thermowells, liquid crystal...Dir.-Oper.; J. E. Hope,
Mktg. Mgr.
Heating and cooling equipment, hydronic specialties, centrifugal pumps, heat transfer equipment, packaged products, condensate handling equipment, vacuum pumps and vacuum heating units.

Beltran Associates...Stevenson, Pres.; C. Stephenson, V.P.-Engr.; S. Allison, Sales Engr.
Mfr. and private labeling thermistors , RTD's, semiconductors, temperature transmitters, humidity transmitters and related products for building automation.

Bunting Bearings...Svcs. Mgr.
Refrigeration condensors, condensing units and unit coolers; chillers, compressor rack systems, coils.

Century, Heat Controller, Inc.
1900 Wellworth Ave., Jackson, MI 49203
(517) 787-2100 Fax: (517) 787-9341...651-1777
dylon@worldnet.att.net
W. H. Manrodt, Pres.; W. Bachman, Bus. Mgr.
Leak detectors ; high temperature refractory cements; heat transfer compounds.

Dynaforce Corp., A Mestek Company
515 John Fitch Blvd., South Windsor, CT 06074...
and high reliability snap-action
thermostats; thermal cut-off fuses, motor and transformer protectors, packaged thermistors , and flexible heaters.

Elwood Corp., Electronics Group
195 W. Ryan Rd., Oak Creek, WI 53154...

L. Singer, Pres.; D. Singer, V.P.-Mktg.; R. Gertler, Gen. Mgr.
All Reznor waste oil heaters include our patented flow control pump and on board air compressors.

Heatlink U.S.A. Inc.
89 54th St...Fax: (908) 241-7288
sales@istec-corp.com
www.istec-corp.com
B. Amstutz, Pres.
Flowmeters for water, condensate, steam, oil , etc.; BTU meter selection for heating and cooling; radiator valves, temperature control valves, boiler controllers...956-9885
D. Kleiman, Pres.; J. Mortensen, Natl. Sales Mgr.
Sealing compounds, soldering fluxes, leak detectors , hand cleaner, heat absorbing paste.

Lakos Separators
1365 N. Clovis Ave., Fresno, CA 93727
(559) 255-1601 Fax...
setback thermostats for light commercial heating/cooling, including fossil fuels, heat pumps, and electric baseboard heat ; with remote temperature sensing .

The Lincoln Electric Co.
22801 St. Clair Ave., Cleveland, OH 44117
(216) 481-8100 Fax...metrosonics.com
www.metrosonics.com
R. Unger, Pres.; J. Fouret, Natl. Sales Mgr.
Instrumentation for measuring and analyzing air quality, heat stress, temperature, noise, voltage, current, power, and toxic gas; data logging applications.

Metzger Machine Corporation...572-7822
J. Moratalla, Pres.; J. Sifontes, Dir.-Engrg.; P. Flasher, Admin.
OEM, custom built heat exchangers, sensible , latent, enthalpy, rotary, fluted or plates, air-air, liquid-air and plastic coils, portable desiccant...

7/6,KWIC/31 (Item 18 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

05999452 Supplier Number: 53381997 (USE FORMAT 7 FOR FULLTEXT)
DOE funds more oil recovery research work.
Nov 30, 1998
Word Count: 652

... guidance while drilling.
* University of Southern California will determine how interactions that occur during heavy oil recovery affect reservoir fluid flow and assess their effects on production to improve recovery.
* University of Oklahoma will develop methods...

...processor calculates interference between the two signals to determine the amount of displacement in the sensor element, caused by heat , pressure, fluid flow, or some other variable that the sensor is measuring in the reservoir...

7/6,KWIC/32 (Item 19 from file: 16)

DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

03591925 Supplier Number: 45054356 (USE FORMAT 7 FOR FULLTEXT)
New presulfiding technique proves successful in commercial trials
Oct 10, 1994
Word Count: 2105

... agent is injected. This typically requires 8-12 hr if the unit is operating on oil flow , but it can take 2-3 days if there is only gas flow.
Once the...

...catalyst.
Fig. 2 illustrates a fairly typical activation for presulfided catalyst in a unit under oil flow . The data for the figure were taken from a gas oil desulfurization unit at Conoco...

...with about 160,000 lb of Criterion 424 catalyst presulfurized by the elemental sulfur process. Oil and gas flow were established, and the reactor temperature was increased.
Fig. 2 also shows that, when the...

...The temperature increase at the bottom thermocouples was about 100-150 deg F., even with oil flow through the unit.
Once the exotherm has passed through a reactor, the unit temperature typically...

...program in the late 1980s. Two deficiencies had to be overcome:
Excess sulfur removal under oil flow
Large exotherms caused by rapid activation.
After spending 3 yr and $1 + million, CRI's...of the activation process. To resolve this weakness, CRI utilized differential scanning calorimetry (DSC), which measures precisely the heat released from chemical reactions.
As shown in Fig. 4, a sample is placed in a...

...catalysts are of prime interest. Hydrocracking catalysts are normally activated with H(2)S in flowing hydrogen. Oil circulation is used rarely because of concerns with uncontrolled hydrocracking reactions. As a consequence, several...

...commercial application of actiCAT-processed catalysts in a hydrocracker took place in 1993. Activation without oil flow occurred in a highly controlled fashion, with exotherms never exceeding 25 deg F. through any...

7/6,KWIC/33 (Item 20 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

02794156 Supplier Number: 43751249 (USE FORMAT 7 FOR FULLTEXT)
SENSOR MARKETS AND TECHNOLOGIES UPDATE: SFU APPLIES MICROMACHINING EXPERTISE TO VITAL INDUSTRY NEEDS
April, 1993
Word Count: 1496

... tiny heater include a controlled thermal emitter for calibration of infrared systems, and providing local heat (hot spots) for chemical sensors .
Jim McEwen, president of Western Clinical Engineering (Richmond, BC, Canada), a manufacturer of pressure cuffs...

...It's like a mercury thermometer where you can see the fluid column,"

Parameswaran explain "Oil flows into the capillary when pressure is applied to the blood pressure cuff. By reading the...a very rapid thermal response and can detect temperature in milliseconds. A common method for measuring low vacuum involves detecting the heat transfer between a hot wire and a cold wire. At higher vacuums, there are less...

...micromachines is their small size, which can enhance their reliability. For example, the smaller the heat sensor , the less likely the device will affect the measured medium, such as water. According to...

7/6,KWIC/34 (Item 21 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

02624807 Supplier Number: 43490435 (USE FORMAT 7 FOR FULLTEXT)
PERFORMANCE WITHOUT POLLUTION
Dec, 1992
Word Count: 1114

... pump was introduced to overcome these problems. The pump is continually flushed with a fresh flow of oil which is emitted from the exhaust. This prevents a build up of solvents or corrosives...

...allows processing to take place at lower pressures, reducing energy costs, and enables processing of heat sensitive products. It allows valuable products and solvents to be collected uncontaminated and recycled or sold...

7/6,KWIC/35 (Item 22 from file: 16)
DIALOG(R)File 16:(c) 2001 The Gale Group. All rts. reserv.

02609919 Supplier Number: 43468775 (USE FORMAT 7 FOR FULLTEXT)
WHERE THEY STOP NOBODY KNOWS: Three key factors are working to ensure that today's cars are capable of lasting far beyond what once was considered normal
Nov 23, 1992
Word Count: 1745

... coolant was drained, they weren't put off by the fact aluminum can be more sensitive to heat than cast iron. Electronics offered a solution. If temperature sensors record excessive heat , the Northstar's computer shifts into a limp-home mode. The transmission is locked in...

...from bank to bank, with four cylinders firing while the others are cooled by air flow and engine oil . The program is intended to allow drivers to get their car home or to a...

7/6,KWIC/36 (Item 1 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

13119222 SUPPLIER NUMBER: 70656204 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Heat exchangers help designs keep their cool.
Jan, 2001
WORD COUNT: 3253 LINE COUNT: 00263

... seal each end of the shell. Cool water flows inside the tubes, and hot hydraulic oil flows around the tubes within the shell.
These heat exchangers are made of red brass, copper...min or 229,200 BTU/hr, or 67.14 kW. After the system is built, heat rejection is determined by measuring the fluid temperature rise during system

operation over a period of time. Temperature rise per...

...contacting the representative, be prepared to provide the following:
* oil heat load in BTU/min
* oil flow in gpm
* maximum oil temperature
* ambient air temperature during system operation
* environmental contaminants that can affect the system, and...

7/6,KWIC/37 (Item 2 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

13016205 SUPPLIER NUMBER: 62384641 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Controlling vessels and tanks.
March, 2000
WORD COUNT: 7567 LINE COUNT: 00590

... the setpoint is above the weir, it defeats its purpose by allowing mixed feed to flow directly to the oil outlet before it has time to separate. Thus, a split-range controller will sacrifice either...of freezing impulse lines. However, in extremely cold weather, it may still be necessary to heat trace the capillaries to prevent measurement response from being excessively slow. Self-limiting electrical ...way to go! Any heat tracing system involving a thermostat will introduce spikes into the measurement system as the heat is switched on and off.
* Uncertain phase--This is the most important of all seal...

7/6,KWIC/38 (Item 3 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

12131915 SUPPLIER NUMBER: 59972331 (USE FORMAT 7 OR 9 FOR FULL TEXT)
EQUIPMENT.
Winter, 1999
WORD COUNT: 4463 LINE COUNT: 00360

... rotor. In addition to nog profiles making the rotors ideally suited for compounding technologically advanced heat sensitive elastomeric materials, high velocity water circulation in the state-of-the-art NR5 rotors eliminates...of 400 (degrees) F and is available in heater sizes up to 24 kW and oil -flow rates to 30 GPM. (Budzar Industries, 38241 Willoughby Pkwy., Willoughby, OH 44094-7582)
Circle 28...

7/6,KWIC/39 (Item 4 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

11763764 SUPPLIER NUMBER: 57485725 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hydrocarbon Processing's Advanced Control and Information Systems '99.(innovations in control hardware and software packages)
Sept, 1999
WORD COUNT: 60179 LINE COUNT: 05469

... column pressure, sour product flowrate and acid gas content, MVC predicts reboiler steam or hot oil flowrate to strip lean amine to its optimal residual (H.sub.2)S and C(O.sub.2) content. Top tray temperature is used as an inference measurement to further manipulate heat input to the reboiler. MVC also determines the setpoint of the condenser temperature, from the...hydrogen conversion, reactor and fractionator constraints. The controller adjusts unit fresh feed, reactor inlet hydrogen

flow and temperatu[redacted] recycle oil feed to the second stage, reactor bed inlet temperatures and hydrogen make-up and purge...

7/6,KWIC/40 (Item 5 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

11576950 SUPPLIER NUMBER: 57951045 (USE FORMAT 7 OR 9 FOR FULL TEXT)
THE ASME FELLOW.
Nov, 1999
WORD COUNT: 11957 LINE COUNT: 01024

... cooling, nuclear reactor safety, proton beam stop design, isotope separation thermal control, coupled unsteady gas-heat transfer measurements , and fluid-structure interaction systems development. His research has included convecting flows of a radiating...

...inherent van- ability. He has contributed to the methodology for such diverse problems as water-oil flow in heterogeneous soil, retention of lubricant layers by surface asperities of rigid magnetic disk, and...

7/6,KWIC/41 (Item 6 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

11055442 SUPPLIER NUMBER: 54682811 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Leak hunting.(methods for leak testing in heat exchangers)
April, 1999
WORD COUNT: 2218 LINE COUNT: 00176

... plant downtime and maintenance.
To illustrate the use of these devices we can consider a heat exchanger or pasteuriser. The leak detector is connected to one side of the apparatus, most often the product side. A positive...potential.
The Shell Oil Company has developed a statistical software programme - based on carefully modelled flow -rates in oil pipelines - that can detect significant leaks (5). Heat exchangers may also be tested for leaks via ultrasonic detection (6,7). Unfortunately, the method...

7/6,KWIC/42 (Item 7 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

10958665 SUPPLIER NUMBER: 54296953 (USE FORMAT 7 OR 9 FOR FULL TEXT)
PRODUCT BRIEFS.
March, 1999
WORD COUNT: 2449 LINE COUNT: 00209

... using a Windows NT operating system and a realtime kernel.
For more information, circle 187
Oil filter has flow separator
A full-flow /bypass oil filter from Wix Filtration Products Div., Dana Corp. has a flow separator that uses design...

...single chip solution to signal conditioning for bridge-type or bridge-configured sensors such as thermistors , strain gauges, load cells, and pressure sensors. On-chip features reduce external component count and ...American Stress Technologies' Gear Inspection Stand is an off-line audit inspection system used to detect grinding damage and some heat -treat qualities, and to monitor the residual stress from manufacturing processes. The device requires manual...

7/6,KWIC/43 (Item 8 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

10419409 SUPPLIER NUMBER: 21057144 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Chiller Upgrade? Take Systems Approach.
August, 1998
WORD COUNT: 3966 LINE COUNT: 00321

TEXT:
...non-CFC refrigerants may be cost effective. Retrofitting may require replacement of compressor seals, lubricating oil , and refrigerant-flow and pressure-control devices. Ironically, retrofitting may result in a loss of chiller capacity (up...

...are available to minimize this contamination. Facilities that require year-round cooling due to high sensible heat gains would most likely benefit from direct free cooling. An example of such a facility...

7/6,KWIC/44 (Item 9 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

09941284 SUPPLIER NUMBER: 20098662 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hydraulics helps in the sky, on the ground. (aerospace applications)(includes related articles)
Oct, 1997
WORD COUNT: 2651 LINE COUNT: 00214

... demands and internal leakage.
A typical aircraft hydraulic power generation system consists of pumps, filters. heat exchangers, reservoirs. accumulators, valves, and sensing equipment. An engine-driven pump (EDP) provides the primary source of hydraulic power for most...

...regulated fluid to the components.
Temperature extremes are avoided by thermostatically controlling pump case drain oil flow to fuel-immersed or forced-air-type heat exchangers. Contaminants are removed from the oil...

7/6,KWIC/45 (Item 10 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

09917311 SUPPLIER NUMBER: 19937083 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Appraisal of exploration prospects using extended well testing.
August, 1997
WORD COUNT: 2005 LINE COUNT: 00164

... ESP) was successfully deployed and, operated on a temporary completion with subsea test tree (SSTT). Oil flow rates up to 20,000 b/d-were produced.
The data collected has confirmed a...the oil-in-water content
* A monitoring system on the steam side of the interstage heat -exchangers to detect any loss of hydrocarbons from the process stream
* Installation of a deluge system to cover...

...program
After some delay, principally caused by the sector-wide industrial action in 1996, first oil finally flowed on 21 July 1996. Within two days the potential problems of handling such a difficult....

...and these provide evidence that the pre-packed screens appeared to be restricting the comingled flow of water and oil from the areas where coning was expected. Nevertheless, a maximum watercut of 11% or almost...

7/6,KWIC/46 (Item 11 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

09647649 SUPPLIER NUMBER: 18332797 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Controlling shell and tube exchangers.
March, 1996
WORD COUNT: 6033 LINE COUNT: 00462

... be controlled--the amount of heat exchanged. In practical situations it is not possible to measure heat flux. It is the temperature, not the heat flux, of one fluid or the other...to keep the process stream at a constant temperature. There is no reason to maintain oil flow in excess of what is needed--it can be throttled to control temperature. In this...

7/6,KWIC/47 (Item 12 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08953964 SUPPLIER NUMBER: 18632556 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sewer maintenance & rehabilitation. (The 1996 Public Works Manual)(Water Pollution Control)
April 15, 1996
WORD COUNT: 9813 LINE COUNT: 00809

... oil is then flocculated and encapsulated for easy removal. McTighe Industries, Inc. makes both low flow and high flow oil /water separators. Precast oil /water separator units are available from ACO Polymer Products, Inc. Oil/water separators are produced...for emergency use; as well as detectors for oxygen. A personal alert safety system that detects high heat situations, lack of motion by the wearer, as well as gas is available from Grace...

7/6,KWIC/48 (Item 13 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08932862 SUPPLIER NUMBER: 18586006 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Mexico's IMP seeks to lead in oil recovery methods. (Mexican Petroleum Institute)
June, 1996
WORD COUNT: 1463 LINE COUNT: 00116

... recovery. "We are using miscible gases, carbon dioxide, surfactants, polymers, and thermal processes to improve oil flow . We are searching constantly for the best techniques in oil field engineering that are relevant...

...different pressures and temperatures. Displacement experiments of this type are done in the laboratory.
"I heat up the gas and measure the fluids being produced. I measure the porousness and the permeability in order to characterize...

7/6,KWIC/49 (Item 14 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08777446 SUPPLIER NUMBER: 18378502 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Products and services. (part 5, from Grounds Maintenance through Modular Aluminum Panel Systems)(1996 Municipal Index Special issue)(Directory)
April 30, 1996
WORD COUNT: 26796 LINE COUNT: 02090

... 8200. See our card in Professional Services Directory SEE OUR AD ON PAGE 218.
Infrared Heat Detectors
AGEMA INFRARED SYSTEMS, 550 County Ave., Secaucus, NJ 07094. (201) 652-8314; FAX: (201) 867...91319), Newbury Park, CA 91320. (805) 499-8729: FAX: (805) 499-9084. Manufacturer of AQUA FLOW LUBRICANTS. Nontoxic synthetic waterproof lubricating oils and greases. Biodegradable, will not wash out, will not emulsify with water, wide extremes of...

7/6,KWIC/50 (Item 15 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08542449 SUPPLIER NUMBER: 18067211 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Conquer heat exchanger fouling.
Jan, 1996
WORD COUNT: 6060 LINE COUNT: 00509

... in cell growth rate. If, however, the temperature rises to an even higher level, some heat -sensitive cell constituents may deactivate. For any particular organism, there is a temperature below which reproduction...
Table 1. Heat exchanger data for Case Study 1

	Shellside	Tubeside
Fluid	Vacuum residue	Crude oil
Flowrate , kg/h	55,436	169,082
Temp. in/out, (degrees) C	350/300	271/288...

baffle cut should be between 20% and 30%, with 25% being the most optimum. For sensible heat transfer on the shellside, the baffle cut should never be vertical as stratification will occur...

7/6,KWIC/51 (Item 16 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08128731 SUPPLIER NUMBER: 17405409 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Rheological modification of solvent-based industrial coatings.
August 14, 1995
WORD COUNT: 2852 LINE COUNT: 00250

... should show some degree of thixotropy.
Pseudoplastic additives show little thixotropic behavior, but hydrogenated castor oil types possess superior flow and leveling compared to the organoclays.
Previously, thixotropic resins were restricted to the decorative paint ...

...other hand, exhibit better flow and leveling properties due to superior thixotropic characteristics, but are sensitive to heat and strong solvents. HCO waxes are soluble in xylene at temperatures in excess of 35 ...

7/6,KWIC/52 (Item 17 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08124482 SUPPLIER NUMBER: 17389785 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Ceramic heater rollers an exciting new alternative.
August, 1995
WORD COUNT: 1433 LINE COUNT: 00121

... waste oil requires special packaging and disposition at expensive, isolated toxic waste landfills. Also, carbonized oil restricts flow and coats the internal surfaces of the roller, hoses, pumps and filters. This negatively affects...

...the information and determines how much power should be sent to the heater element.

Since heat is produced and measured near the outer core, the desired roller-surface temperature can be accurately monitored and maintained...

7/6,KWIC/53 (Item 18 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

08124425 SUPPLIER NUMBER: 17389671 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Plastics technology: manufacturing handbook & buyers' guide 1995/96.(Buyers Guide)
August, 1995
WORD COUNT: 174436 LINE COUNT: 15187

... extrusion at rates to 45 lb/hr; and a conical design for extrusion/mixing of heat -sensitive or highly lubricated materials at rates to 35 lb/hr - supplied also in a corotating...

...Compounding, Mixing, Blending Systems.)

CINCINNATI MILACRON/PLASTICS EXTRUSION SYSTEMS BUSINESS

Conical twin-screw extruders process heat -sensitive materials such as flexible or rigid PVC. Five basic models: CMT-35, CM-55, CM...and PS. Options include standard, heat-channel, and heat-exchanger pellet plates with steam or oil heating. Electric or hydraulic cutter motor.

Dry-face pelletizer for very temperature-sensitive materials or...

...water-cooled tie-rod design eliminates thermal influence on knife/die-face alignment. Smooth slurry flow eliminates fines accumulating on pellets due to stagnation. Die plates employ latest alloys and patented bonding techniques for maximal abrasion and corrosion resistance. Die plates with heat channels and heat -exchanger pipe maximize heating efficiency and minimize pressure loss. Die plates retrofit to any manufacturer...cycle. Computer control system has cycle editor with more than 24 controllable parameters, including part-heat rate, guaranteed soak, exotherm detection , pressure rate, vacuum levels, and alarms.

UNITED MCGILL PPD CORP.

Autoclave systems operate at up...refurbishing.

QUADRO, INC.

Quadro Comil conical screen mill is said to be especially suited to heat -sensitive materials and to dispersing wet and dry materials before extrusion or other processing steps in...cone mixer for plasticized PVC, KP two-stage compounder (twin-screw and single-screw) for heat - and shear-sensitive materials, universal-type internal mixers with or without discharge screw, and intensive internal batch mixers...CORP.

Ultramax software improves quality and productivity of molding processes by analyzing control settings against measured results to understand cause-and-effect relationships. It guides the user run-by-run to ...and band heaters, as well as laboratory and specialty units. Accessories include thermocouple, RTD, and thermistor sensors, along with associated

wire, connectors and hardware. Also heating-system instrumentation such as controllers...heaters.

Temperature Sensors, Monitors, Controls

PRODUCT LINES REVIEWED

ADVANCED DYNAMICS

Line of thermocouples, RTDs, and thermistor probes. Specialty is custom manufacturing and application problem-solving. Patented probes include "retractable" melt thermocouple...

...to be checked. A-B switch gives instantaneous digital reading of the difference between temperatures measured by A probe and B probe (used for differential measurements such as inlet/ outlet temperatures...

...on all ranges, reversed-polarity indication, and diode-test range.

ANAFAZE INC.

Noncontact infrared temperature sensors measure products such as extruded materials and sheets in thermoforming. Temperatures range from 0 F to...1 degrees| and 0.01 degrees| C resolution for 2-, 3- and 4-wire RTD measurements , and same options as AN2402.

ATHENA CONTROLS, INC.

Hot-runner and panel temperature controls include...

...for molds, barrels, and platens.

BARBER-COLMAN CO. INDUSTRIAL INSTRUMENTS DIV.

Full range of temperature sensors includes patented Vari-depth sensor , adjustable to any immersion depth.

Four new single-zone temperature/process controllers in the new...

...PLASTICS MACHINERY DIV.

See Hot-Runner Components and Systems.

CMC TECHNOLOGIES, LTD.

Combination pressure/temperature sensor offers IEEE 485 "addressable" serial output (in addition to basic RS232 digital output), which is said to permit economical monitoring of multiple machines. Pressure, temperature, and combination sensors have the same threads and housings, making them interchangeable.

CONCEPT ENGINEERING

Mark R noncontact temperature...

...KING, INC.

See Hot-Runner Components and Systems.

COOPER INSTRUMENT CORP. ELECTRO-THERM DIV.

Digital thermistor units range from hand-held units to panel-mounted meters with alarm capabilities and accuracies...be screwed directly into pipe fitting or thermowell.

GIC THERMODYNAMICS

Line of thermocouples, RTDs, and thermistors . Melt-bolt and springloaded designs, along with accessories such as lead wire, fittings, and connectors...

7/6,KWIC/54 (Item 19 from file: 148)

07764979 SUPPLIER NUMBER: 16984490 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Use process integration to improve FCC/VRU design. (fluid catalytic cracker vapor recovery units)(part 1)

March, 1995

WORD COUNT: 4227 LINE COUNT: 00344

... of heat and flow directly to the main fractionator's bottom. The main fractionator removes sensible and latent heat from reactor

effluent and separat[redacted] it into vapor and liquid streams[redacted] overhead, a lean oil...secondary absorber comes from this pumparound. Moving further down the main fractionator, a light cycle oil (LCO) sidestream flows to a side-stripper, designed to remove light components. LCO product from this side-stripper...

7/6,KWIC/55 (Item 20 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

07671997 SUPPLIER NUMBER: 16222813 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Ford AXOD-E automatic transaxle diagnosis. (operation of Ford Motor Co.'s transaxle electronic automatic transmission is discussed to help in diagnosis of problems; includes related article on a mail-in test form)
Jan, 1995
WORD COUNT: 2072 LINE COUNT: 00163

... Oil Temperature Sensor) is located on the transmission control valve body. Being a temperature-sensitive thermistor , the unit monitors the temperature of the transmission oil. The ECA uses this signal to...the AXOD-E transaxle. Each solenoid uses a 3-port, normally open feed to control oil flow to its attending shift valve. Each shift solenoid is normally open. When the solenoid de...

7/6,KWIC/56 (Item 21 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

07611020 SUPPLIER NUMBER: 16561696 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Firefighting: the mechanics of oil/gas fires, meltdown and secondary damage, water/chemical/explosive extinguishing methods and considerations for voluntary ignition. (Blowout Control: Response, Intervention and Management, Part 9)
Oct, 1994
WORD COUNT: 3437 LINE COUNT: 00268

... boots and heavy cotton, outer wear, under a continuous water spray.
In Kuwait, maximum recording heat strips measured temperatures as high as 230 [degrees] C (446[degrees] F) on the hard hats of...absorption) and reflect radiant heat. Use on blowouts is restricted to gas condensate fires and oil wells where lateral flow has led to a large fire-surface area.
Foam can help contain fire near the...

...flow source. Generally, water alone is adequate for this, but with large, low-velocity, lateral oil flow , foam may be required. Modern firefighting foam such as 3M Lightwater ATC is commonly used...

7/6,KWIC/57 (Item 22 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

07550703 SUPPLIER NUMBER: 16339032 (USE FORMAT 7 OR 9 FOR FULL TEXT)
FBC to burn oil shale in the northern Negev. (fluidized bed combustion; Israel Electric Corporation Ltd.'s proposed oil shale-fired power plant)
Sept, 1994
WORD COUNT: 2378 LINE COUNT: 00208

... the boiler by four mechanical conveyors. Each of them designed for 50 percent of nominal oil shale consumption.
Oil shale flow is controlled by the steam demand. For boiler start-up, and when oil shale is...the future commercial boiler. This

especially relates to the items listed in Table 6:

The oil shale flow per feed point in the commercial boiler will be close to that in the demonstration unit when fed from one side. The same may be said about the ash cooler flow .

Commercial power plant

The commercial oil shale power station will provide base load electric power to the national electricity network of...

flow (t/h) - 50

Main steam temperature ([degrees] C) - 480

Main steam pressure - 44 bar

Oil shale flow - 55 t/h

Table 4. Comparison of Israeli oil shale and bituminous coal

	Oil shale...
...0-12.5	
Unburned carbon	0.7-1.0
Radiation and convection	0.5
Ash sensible heat	3.0-5.0
Efficiency:	81.0-84.8
Internal consumption (MWe)	1.8
(inc...	

...7. Quantitative estimates for the first generation unit

Gross electrical power (MW)	75
Main steam flow (t/h)	230
Oil shale supply rate (t/h)	290
annual (106 ton)	2.0
Ash removal rate (t...	

7/6,KWIC/58 (Item 23 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

07269745 SUPPLIER NUMBER: 15485061 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sewer maintenance and rehabilitation. (1994 Public Works Manual: Water Pollution Control)
April 15, 1994
WORD COUNT: 9590 LINE COUNT: 00783

... oil is then flocculated and encapsulated for easy removal. McTighe Industries, Inc. makes both low flow and high flow oil /water separators. Precast oil /water separator units are available from ACO Polymer Products, Inc. An oil/water separator is...for emergency use; as well as detectors for oxygen. A personal alert safety system that detects high heat situations, lack of motion by the wearer, as well as gas is available from Grace...

7/6,KWIC/59 (Item 24 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06813314 SUPPLIER NUMBER: 14465623 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Advanced process control strategies '93.
Sept, 1993
WORD COUNT: 37193 LINE COUNT: 03337

... pressure, sour product flowrate and acid gas content, MVC feedforward predicts reboiler steam or hot oil flowrate to strip lean amine to its optimal residual H2S and [CO.sub.2]/[C.sub.2] content. Top

tray temperature is used as an inference measurement to further manipulate heat input to the reboiler. MVC calculates from the reflux drum pressure and the condenser outlet...control achieves efficient combustion.

Furnace coil steam injection control guards against excessive coking at low oil flows , while conserving steam at high feed rates.

Furnace firing balancing control achieves more efficient furnace... LCO 95% 8. Regen. cat. SV position 9. LCO pumparound 10.HCO pumparound 11.Decant oil pumparound 12.HCO recycle flow 13.MCB recycle flow

Constraint variables

1. Frac. ovhd. pres. 2. Frac. ovhd. PC % 3...product

4. Lower heat/utility consumption. Instead of having fixed reflux and reboiler steam/hot oil flowrates , the flowrate setpoints of column top reflux and the bottom reboiler steam/hot oil are continuously manipulated...rigorous off-line distillation models. The on-line algorithms use a minimum of on-line measurements . Consequently, complicated on-line heat -and-material balances are not required. Laboratory data are used for periodic updates and feedforward...Control strategy: Based on real-time operating conditions, MVC manipulates debutanizer reboiler steam (or hot oil) flowrate and reflux flowrate , deisobutanizer feed flowrate and reflux flowrate. The controlled variables are debutanizer bottoms gasoline Rvp value...

...methane to ethane ratio in the demethanizer and reduce energy consumption in the still.

Lean oil flow to the absorber is manipulated to optimize recovery of ethane and heavier components. A trade...

7/6,KWIC/60 (Item 25 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06812472 SUPPLIER NUMBER: 14229437 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Process fluid measurement.
Sept, 1993
WORD COUNT: 482 LINE COUNT: 00038

... Rinker Materials Corp. in Miami uses the EXA IC200 for in-line analysis of waste oil /water flow used in liquid recycling. Classic Controls Inc. in Lakeland, Fla., a control company, adapted the...

...temperature and long-term drift caused by magnetic offset between the two toroidal coils. A thermistor within the IC40 probe compensates for varying process liquid temperatures, keeping the analyzer's accuracy...

7/6,KWIC/61 (Item 26 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06781811 SUPPLIER NUMBER: 14233452 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The top 50 products of 1992. (Buyers Guide)
July, 1993
WORD COUNT: 6505 LINE COUNT: 00582

... 400. The 4L80E filter cover, made of glass-reinforced nylon, incorporates design features that improve oil flow over the all-metal THM-400.

Circle 384

Truck ABS/ASR

Robert Bosch Corp. offers...ink serves as the heating element and temperature sensor, resulting in increased control over surface-heat distribution and optimized temperature sensitivity . Through the use of

CAD/CAM, customized heater designs can be produced in less than...

7/6,KWIC/62 (Item 27 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06734072 SUPPLIER NUMBER: 14530549 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Helping hydraulics keep its cool.
Sept, 1993
WORD COUNT: 3079 LINE COUNT: 00246

... bundle patterns (square or triangular centerline spacing when viewed from the tube ends) help the oil flow turbulently over the tubes. The baffles inside the shell increase the distance the oil must... heat exchangers port cooling water inside the tubes (tube side) of the exchanger; the heated oil flows around the tubes in the shell side. These heat exchangers are made of red brass...

...tube bundle run through varying numbers of baffle plates that support them and cause the oil to flow at right angles to the tubes as oil travels from one end of the shell...min or 229,200 BTU/hr, or 67.14 kW. After the system is built, heat rejection is determined by measuring the fluid temperature rise during system operation over a period of time. Temperature rise/unit...

...contacting the representative, be prepared to provide the following: * oil heat load in BTU/min * oil flow in gpm * maximum oil temperature * ambient air temperature during system operation * maximum allowable pressure drop * system elevation, and * environmental...

7/6,KWIC/63 (Item 28 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06496192 SUPPLIER NUMBER: 14108176 (USE FORMAT 7 OR 9 FOR FULL TEXT)
HVAC: quality control. (heating, ventilating and air conditioning)(includes related article)
May-June, 1993
WORD COUNT: 4481 LINE COUNT: 00347

... return of lubricating oil.
LINE SETS POORLY INSTALLED AND CHARGE NOT CHECKED
Residential cooling and heat pump equipment is sensitive to the amount of refrigerant in the system. Both capacity and energy efficiency are affected...

...agree on the precise use of loops, traps, etc. that are introduced to assure proper oil return and correct refrigerant flow . But it is critical that refrigerant piping be carefully routed, pitched and trapped according to...

7/6,KWIC/64 (Item 29 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06453978 SUPPLIER NUMBER: 13859723 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Enhanced process configurations for the CBA process. (cold bed adsorption)
March-April, 1993
WORD COUNT: 5070 LINE COUNT: 00413

... recovery facilities at Bab/Habshan in Abu Dhabi, U.A.E. for Abu Dhabi National Oil Company. A simplified flow diagram of this process

is provided in Fig.
In the three-reactor CBA/rotate...generation. In the high-energy recovery process, boiler feedwater is first used to remove the sensible and condensing heat of the hot process gases and ultimately to generate low pressure (5-7 bara) and...

7/6,KWIC/65 (Item 30 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06449114 SUPPLIER NUMBER: 13689436 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Understanding corrosion in alkanolamine gas treating plants: proper mechanism diagnosis optimizes amine operations. (part 1) (Gas Processing Developments)
April, 1993
WORD COUNT: 3440 LINE COUNT: 00300

... Chromium carbide precipitation promotes corrosion in grain boundaries by improper heat treatment or welding techniques. Heat treatment outside the sensitizing range and low carbon stainless steels such as 304L and 316L have helped reduce intergranular...Proceedings of the 1966 Gas Conditioning Conference. [17] Sheilan, M. and Smith, R. F., "Hydraulic Flow Effect On Amine Corrosion," Oil & Gas Journal, November 19, 1984. [18] Chakma, A. and Meisen, A., "Activated Carbon Adsorption of ...

7/6,KWIC/66 (Item 31 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06220059 SUPPLIER NUMBER: 12827537 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Getting the most for your money. (air compressors; includes compressed air glossary) (Air Compressor Guide)
July 9, 1992
WORD COUNT: 2680 LINE COUNT: 00234

... pressure gauge connections
Compressor cleanliness: maintain in a clean condition; a compressor should never leak oil
Coolers: check water quality, flow , and temperature in water cooled units; check inlet filters and cooler in air cooled models...

...load hours are easier to maintain and troubleshoot
Compressed Air Glossary
Absolute pressure. Total pressure measured from absolute zero.
Aftercooler. Heat exchanger for cooling air discharged from air compressors.
Atmospheric pressure. Pressure above absolute zero at...

7/6,KWIC/67 (Item 32 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

06169208 SUPPLIER NUMBER: 12813783 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hydrocarbon Processing's Advanced Process Control Handbook VII. (Cover Story)
Sept, 1992
WORD COUNT: 29334 LINE COUNT: 02689

... absorber overhead ([C.sub.[H.sub.2]S). The corresponding three manipulated variables are lean oil flowrate , reboiler duty and reflux flowrate . MVC resides wholly within a PC-386/486 and interfaces with the

plant control system. efficient furnace combustion.

Furnace coil steam injection control guards against excessive coil coking at low oil flows , while conserving steam at high oil feed rates. This strategy also helps reduce waste condensate production from the delayed coking unit...product

4. Lower heat/utility consumption.

Instead of having fixed reflux and reboiler steam/hot oil flowrates , the flowrate setpoints of column top reflux and the bottom reboiler steam/hot oil are continuously manipulated...rigorous off-line distillation models. The on-line algorithms use a minimum of on-line measurements . Consequently, complicated on-line heat -and-material balances are not required. Laboratory data are used for periodic updates and feedforward...

7/6,KWIC/68 (Item 33 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05930486 SUPPLIER NUMBER: 12493677 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Getting the most for your money: how to select and protect your air compressor investment. (includes related article) (Air Compressor Guide) (Buyers Guide)
April 9, 1992
WORD COUNT: 2740 LINE COUNT: 00239

... pressure gauge connections

Compressor cleanliness: maintain in a clean condition, a compressor should never leak oil

Coolers: check water quality, flow , and temperature in water cooled units; check inlet filters and cooler in air cooled models...

...load hours are easier to maintain and troubleshoot

Compressed Air Glossary

Absolute pressure. Total pressure measured from absolute zero.

Aftercooler. Heat exchanger for cooling air discharged from air compressors.

Atmospheric pressure. Pressure above absolute zero at...

7/6,KWIC/69 (Item 34 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05920094 SUPPLIER NUMBER: 12541682 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sewer maintenance and rehabilitation. (Buyers Guide)
April 15, 1992
WORD COUNT: 8915 LINE COUNT: 00735

... oil is then flocculated and encapsulated for easy removal. McTighe Industries, Inc. makes both low flow and high flow oil /water separators. A separator designed to separate floating oil and settleable greasy solids is produced...air for confined entry areas or for emergency use. A personal alert safety system that detects high heat situations, lack of motion by the wearer, as well as gas is available from Grace...

7/6,KWIC/70 (Item 35 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05858889 SUPPLIER NUMBER: 11894484 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The house as a system. (building a comfortable custom house)
Jan-Feb, 1992
WORD COUNT: 2464 LINE COUNT: 00190

... turned on and off, and the winds change in speed and direction.
The overall air flow pattern in typical houses with oil or gas heating systems consists of natural infiltration in the lower part of the house...will also have to be changed, and vice versa. For example, insulation and air sealing measures are designed to reduce heat losses. If extensively applied, these measures can reduce the rate of heat loss to the point where it is far slower than the rate of heat gains...

...moisture removed regularly from the house.
The moisture flow can also be altered without changing heat flow or air flows. Measures to reduce moisture transfer by diffusion, such as the installation of vapor retarders in wall

7/6,KWIC/71 (Item 36 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05496778 SUPPLIER NUMBER: 11408201 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Energy ratings change window market strategies. (includes related article on new window ratings)
Oct, 1991
WORD COUNT: 1577 LINE COUNT: 00126

... consumption is dissipated through windows: An amount equal to the energy produced by all the oil flowing annually through the Alaska pipeline.
Manufacturers join forces to address energy challenges
About two years...

...considered for inclusion on the labels. "Subcommittees also are working on their own procedures to measure such factors as solar-heat gain, which in the past was called the shading coefficient; air infiltration rates; resistance to...

7/6,KWIC/72 (Item 37 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05490674 SUPPLIER NUMBER: 11491555 (USE FORMAT 7 OR 9 FOR FULL TEXT)
'Data cube' depicting fluid flow history in Gulf Coast sediments. (Gulf of Mexico) (Annual Geophysical Report)
Nov 4, 1991
WORD COUNT: 3751 LINE COUNT: 00304

... of the hydrocarbons is related to geopressure offsets across the major growth faults.
Heat, fluid flow
The locations of oil and gas fields in the Eugene Island area are well known, but the controlling fluid...

...horizons give a static view of how the structure and stratigraphy might relate to fluid flow and to the movement of oil and gas. However, the physical and chemical dynamics involved still need to be defined. As...

...temperatures measured in 300 wells from a detailed study area within the data cube.
Conductive heat transfer
Studying the measured surface heat flow anomalies more closely, the GBRN sought to determine if the upper boundary thermal anomalies...
...locations centered on the salt highs to the locations at the seafloor surface, where the heat flow anomalies were measured . Thus, the very

displacement of the surface heat flow anomalies relative to the locations of...accumulation in the data cube area (in Fig. 4, the red areas are high heat flow oil and gas fields). This suggests that the movement of hot fluids from the geopressure chambers...

...cube horizons give a dynamic view of how the structure and stratigraphy relate to fluid flow and to the movement of oil and gas. But the physical and chemical equations involved still have not been defined. An...

...episodic thermal convection within the data cube make it clear that precise modeling of the flow of oil - and gas-saturated fluids is now possible.

The coupled equations describing fluid flow, temperature change...

7/6,KWIC/73 (Item 38 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05467816 SUPPLIER NUMBER: 11234068 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Pelletizers and dicers: product lines reviewed. (1991-1992 Manufacturing Handbook and Buyers' Guide)
July 15, 1991
WORD COUNT: 3353 LINE COUNT: 00279

... face cutter, pellet cooler, and CNC controls. Company also imports planetary-roller extruders for pelletizing heat -sensitive materials up to 7500 lb/hr.

RANDCASTLE EXTRUSION SYSTEMS

Offers two lines of strand pelletizers...

...water filtering and tempering system and, if necessary, hot-oil system.

All die plates are oil -heated with polymer flow passages held at precise temperature. The system is said to be substantially quieter than standard...

7/6,KWIC/74 (Item 39 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05190153 SUPPLIER NUMBER: 10813897 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Regs could severely impact agricultural/heavy construction equipment finishes. (environmental regulations)(includes related article on Moline Paint Mfg. Co.'s sales statistics)
May, 1991
WORD COUNT: 2586 LINE COUNT: 00216

... a trend. "Organic pigments used in place of lead and chrome tend to be high oil absorbers. This can complicate rheology, flow and leveling considerations," says Mitchell. The majority of the A/HCE manufacturers have changed to...similar to a conventional oxidative cure.

Handling the peroxide requires caution. Some peroxides are shock-sensitive ; others are heat -sensitive . They should be isolated in storage.

Formulating a peroxide-cure coating can be tricky. "The...

7/6,KWIC/75 (Item 40 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05164152 SUPPLIER NUMBER: 10696530 (USE FORMAT 7 OR 9 FOR FULL TEXT)
How to better predict BOP accumulator performance. (Special Report: Well Control)

May, 1991
WORD COUNT: 3090 LINE COUNT: 00254

... operate polytropicly, and it is necessary to provide a method of defining the energy transfer flow between the gas and the oil in the calculations.
For this reason, a calculation method was developed that takes into account...

...1.4 (nitrogen)
The adiabatic coefficient y is defined by the ratio of the specific heats and is very sensitive to pressure and temperature, and can reach values much greater than 1.4..(1) For...

7/6,KWIC/76 (Item 41 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

05135199 SUPPLIER NUMBER: 10586267 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Antec 1991 - abstracts of papers. (Society of the Plastics Industry Annual Technical Conference)
March, 1991
WORD COUNT: 56157 LINE COUNT: 04727

... investigated. The dynamic temperature profile was first measured in the unfilled system to establish the heat transfer. The exotherm was then measured in the filled system. 10:00 a.m. Comparison of Liquid Polypropylene Colorant With Polyethylene...Heat Resistance in Polypropylenes J.T Kempthom-Ferro Corp. The automotive industry has used the heat sag test to measure the deformation of elastomeric materials during paint curing. One end of a molded bar is...for crystalline polymer blends.
Session 79 9:30 a.m. Gear Pump-Assisted Extrusion With Heat Sensitive Thermoplastics D.J. Smith-Luwa Corp. Recent technological advances in gear pump design have permitted the successful processing, with a gear pump, of heat sensitive thermoplastics. In detail, the author describes specially designed pump inlet and outlet ports, a fully... dependingon the strain at which the modulus is determined.
Session 106 9:30 a.m. Heat Transfer Measurement at the Mold Surface During Injection Molding of Thermoplastic Melts M.R. Kamal and A...

...transfer coefficients for convective heat transfer between the mold surface and the polymer melt were measured using heat flux sensors at different positions in the mold cavity. Amorphous, semicrystalline, and fiber reinforced polymers were used...without having significant decreases in the material properties of the injection molded part. White mineral oil , a common flow promoter, has disadvantages. N-butyl acrylate, a comonomer, also acts as a flow promoter, but...

7/6,KWIC/77 (Item 42 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

04790425 SUPPLIER NUMBER: 09315345 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Is Edwin Cooper the grandaddy of the additives industry? (Ethyl Corp.; History of Lubricants)
August 6, 1990
WORD COUNT: 1553 LINE COUNT: 00123

... bought by Burmah Oil, Castrol Ltd., decided to go into the lube additive business worldwide, Heath recalled. It didn't make sense for the Wakefield organization to try selling additives to Castrol's

competitors under the Castrol...to show its independence, often bought additives from sources other than Edwin Cooper.

When Burmah Oil ran into cash flow problems, Ethyl acquired Edwin Cooper in July 1975 for about $46 million. That put Ethyl...

7/6,KWIC/78 (Item 43 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

04627504 SUPPLIER NUMBER: 08328881 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cost, safety, productivity pressures spur advancements in fluids. (Lubricants Outlook)
Jan 25, 1990
WORD COUNT: 811 LINE COUNT: 00067

... new product is considered a fast quench oil based on ASTM D3520 Quenching Time of Heat -Treating Fluids. This lab test measures the time required for a static test sample to remove heat from a standard nickel...

...a standard steel pin in a dynamic fluid test," he says. "In this procedure, the oil cools the pin by flowing around it at a prescribed rate. This test configuration more closely simulates a quench bath...

7/6,KWIC/79 (Item 44 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

04601423 SUPPLIER NUMBER: 09141417 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Model calculates wax deposition for N. Sea oils.
June 18, 1990
WORD COUNT: 3803 LINE COUNT: 00311

... may also co-precipitate with the wax crystals.

The presence of wax crystals changes the flow behavior of the crude oil from Newtonian to non-Newtonian. The wax crystals usually lead to higher viscosity with increased crude oils. He concluded that the pour point is insufficient to indicate the flow properties of a crude oil and that viscosity and gel strength should also be considered.

Viscosity is needed for pressure...a high heat-transfer rate on the water side. We also kept a co-current oil -water flow in order to obtain similar entrance effects on inlet and outlet. The flow regime was...

...our model.

The initial wax-deposition rate calculated by the model agrees well with the measurements for the high heat -flux conditions where molecular diffusion is the predominant mechanism. The model takes into consideration that...to higher Reynolds number. This leads to an increase in wax deposition.

At very high flowrates , the oil is no longer cooled to seabed temperature at the exit of the flow line. This...

...pig, and this oil resuspends the wax in front of the pig back into the oil flow .

The wax amount that is removed from the flow line is therefore inaccurately known. This...

7/6,KWIC/80 (Item 45 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

04596515 SUPPLIER NUMBER: 09065403 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Tools assist in mapping fractured reservoirs. (petroleum reservoirs)

June 4, 1990
WORD COUNT: 4947 LINE COUNT: 00404

... is possible as individualized structures, probably with the same formational characteristics but with different pressure flows , gas instead of oil production, and different rates of water production than adjacent wells.

The concealed anticlinal structures and trapping mechanism of this field. Gulf Oil Corp. 1-D Zauk flowed 147 MMcfd of gas.

Another outstanding of example of 100% fracture porosity-permeability is East...a scale of 1:58,000 to identify fractures and faults, where the infrared would detect the higher heat of humidity preserved in concealed fractures and drainage representing the limits of geomorphic structures. The...

7/6,KWIC/81 (Item 46 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

04556121 SUPPLIER NUMBER: 08896019 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Preview the future at leading thermal processing show. (Furnaces 90: The Exhibition for the Thermal Processing Industry)
Jan, 1990
WORD COUNT: 8282 LINE COUNT: 00720

... stainless steel cold wall furnace for applications such as purification of graphite, high temperature physical measurements , sintering and heat -treatment of graphite composites.

Showing details of its extensive range of furnaces including special designs...furnace pressure control, recuperation and instrumentation together with other Laidlaw Drew equipment such as `Precon' oil flow control valves, `LD7000' oxygen monitoring and `Oxytrim' Systems.

These models have been developed by Laidlaw...furnace pressure control, recuperation and instrumentation together with other Laidlaw Drew equipment such as `Precon' oil flow control valves, `LD7000' oxygen monitoring and `Oxytrim' Systems.

These models have been developed by Laidlaw...

7/6,KWIC/82 (Item 47 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

03907008 SUPPLIER NUMBER: 07543875 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Keeping book on bearing health.
April 20, 1989
WORD COUNT: 3200 LINE COUNT: 00262

... ultrasonic sensors is that they provide information on plain bearing wear more directly than other sensors .

Finally, temperature transducers measure bearing heat . Even here, locating the sensor in the housing and on the bearing race, or in proximity to the rolling elements...314-679-4200) helps prevent bearing failure by sensing lubricant now at the bearing. Small thermistors connect to the lubricant fitting. When grease or oil flows over the thermistor , a voltage change occurs, which

7/6,KWIC/83 (Item 48 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

03865951 SUPPLIER NUMBER: 07008340 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Warming trend. (thermal solar power)

Feb 20, 1989
WORD COUNT: 1222 LINE COUNT: 00092

... on a thin, black-coated stainless steel pipe. The sun heats the stream of synthetic oil that flows through the pipe to 735 degrees Fahrenheit. Circulated through heat exchanges in a nearby power...

...solar power using solar heat to produce steam for conventional electrical generation. Goldman designed the heat -collection elements and the sun sensors and computer controls that are at the heart of the Luz system. His partner, Patrick...

7/6,KWIC/84 (Item 49 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

03700727 SUPPLIER NUMBER: 06669336 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Where-to-buy directory: 1988. (metalcasting industry - suppliers and products)
Sept, 1988
WORD COUNT: 234637 LINE COUNT: 20046

... Box 259, Leesburg, NJ
08327, 609-785-2090--See ads in Product Directory Whirl-Air-Flow Corp., 1515 Central Ave. N.E.; P.O. Box
18190, Minneapolis, MN 55418-0190,
612...

7/6,KWIC/85 (Item 50 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

02984450 SUPPLIER NUMBER: 04447210 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Product directory. (Where-to-Buy Directory, 1986)
Sept, 1986
WORD COUNT: 171202 LINE COUNT: 14602

7/6,KWIC/86 (Item 51 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

02972144 SUPPLIER NUMBER: 04427380 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Digital control of fluid flow: improved mechanical and electrical characteristics make solenoid valves more reliable and easier to install.
Sept 11, 1986
WORD COUNT: 1714 LINE COUNT: 00141

... double-acting cylinders will likely have three-way or four-way valves for control. Fuel flow and combustion in gas and oil furnaces often depends on solenoid valves. And they are commonly used for gas and fluid...

...current ratings, and frequencies. However, because the coil is an insulated electrical device and is sensitive to temperature, high heat conditions can restrict valve use.
During normal operation, the coil is subjected to heat from...

7/6,KWIC/87 (Item 52 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

02825967 SUPPLIER NUMBER: 04228665 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Consumer care guide; steps to better car care.
May, 1986
WORD COUNT: 3413 LINE COUNT: 00250

... suspension so they can be flushed out when the oil is changed. Pourpoint depressents allow oil to flow when it is cold. Viscosity improvers maintain a minimum thickness in the oil throughout a...an siren or blink the lights rapidly.

A still more sophisticated version works off a heat sensor . Newer variations can be set to a beeper the car owner can carry in pocket...

7/6,KWIC/88 (Item 53 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

02024665 SUPPLIER NUMBER: 03172272 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Show time 1984. (1984 National Plant Engineering and Maintenance Show)
March 8, 1984
WORD COUNT: 4637 LINE COUNT: 00931

... 1034
Hose and cable reels Heat Exchangers, Inc.
Koldwave Div. 1996
Water-cooled air conditioners
Heath Consultants Inc. 156
Leakage detection equipment
Heath /Zenith, Educational Div. 640
Computers, robotics, training materials
Helwig Carbon, Inc. 2022
Carbon brushes, brush...Management Inc. 1380
Chemical waste management Watpro, Inc. Roofing material
WAukee Enginering Co. Inc. 1666
Oil skimmers, flow meters, mixers Westinghouse Electric Corp.
Sturtevant Div. 2146
Fan service Westinghouse Electric Corp.
Combustion Control...

7/6,KWIC/89 (Item 54 from file: 148)
DIALOG(R)File 148:(c)2001 The Gale Group. All rts. reserv.

01749403 SUPPLIER NUMBER: 02786306 (USE FORMAT 7 OR 9 FOR FULL TEXT)
How to select water-cooled heat exchangers.
June, 1983
WORD COUNT: 1639 LINE COUNT: 00126

... tube sheets; bonnets are bolted to the ends of the shell to complete the assembly. Oil flows around the cooling tubes in a sinusoidal pattern directed by baffles spaced through the length...

...load requires one-half the surface area and costs about one-half as much. If oil flows and temperatures are known, heat load may be calculated:

hp = (gpm)(T)/12.1, where hp is heat load in horsepower, gpm is oil flow in gallons per minute, and T is the desired temperature drop in degrees F.

This...

...helps describe heat load:

BTU/hr = (1.5)(psi)(gpm), where psi is system pressure.

* Flow rate. Ideal oil flow is 0.6 to 0.7 gpm/hp of heat load. Lower flows reduce heat...

...hp requirements and reduces system efficiency.
Ideal water flow is 0.5 to 1 times oil flow . Lower flows reduce cooling efficiency and increase cooler size and cost. Higher flows increase water consumption and...4. Multiply calculated heat load by the ITD correction factor from step 2.
5. Determine oil flow through the heat exchanger in gpm; 0.6 gpm/hp is typical.
6. Plot the intersection of corrected heat load and oil flow on the family of curves to select the proper heat exchanger size. Select the curve...

...with the heat-exchanger supplier. Sample problem
Consider a 300-hp hydraulic system with an oil flow of 100 gpm and a desired operating oil temperature of 125 F; available city water...

...85 F. Using the guidelines, required water flow will be 0.5 to 1 times oil flow or 50 to 100 gpm. 1. ITD is 125 F - 85 F = 40 F. 2...

...4. Heat load times ITD correction factor is (60 hp) (1.2) = 72 hp. 5. Oil flow is 100 gpm. 6. The plotted corrected heat load and oil flow rate intersection, Figure 2, indicates curve number 6 is just above the plotted point. 7...
...90/10 copper-nickel, and shell and bonnets should be brass.
Most shell-and-tube heat exchangers are not sensitive to mounting orientation. Typical pressure and temperature limitations are 150 psi and 300 F, although...

7/6,KWIC/90 (Item 1 from file: 160)
DIALOG(R)File 160:(c) 1999 The Gale Group. All rts. reserv.

01950069
'A pilot plant on a bench,' a pressure reaction calorimeter
June 20, 1988

Mettler Instrumente (Switzerland) has developed a pressure reaction calorimeter that enables accurate measurement and control of the heat generated by semibatch reactions. Existing calorimeters do not allow users to view the reaction because...

...with a clear heat-transfer fluid (silicon oil) so that users can observe the reactions. Oil flows through the double walls at 1 L/sec, providing 1 kW heat transfer capacity to...

7/6,KWIC/91 (Item 2 from file: 160)
DIALOG(R)File 160:(c) 1999 The Gale Group. All rts. reserv.

01161748
Bridgestone has new, fast sensor for safety uses.
December 31, 1984

... corpuscles core that when pressure is applied, the corpuscles merge together quickly allowing electricity to flow . The sensor is heat resistant, oil resistant, waterproof and able to withstand severe temperature changes.
...

7/6,KWIC/92 (Item 1 from file: 621)
DIALOG(R)File 621:(c) 2001 The Gale Group. All rts. reserv.

01069283 Supplier Number: 40338601 (USE FORMAT 7 FOR FULLTEXT)

PERFORMANCE AND VALUE OF FLEETGUARD FILTERS ENHANCED BY MONSANTO'S GEOLAST
March 30, 1988
Word Count: 685

... s 22 Percent. This was
substantially better than any other resin we had tested."

To measure heat aging, Mr. Brown flowed 30w oil at 250 degrees Fahrenheit for 250 hours through a filter using Geolast. "After the test...

7/6,KWIC/93 (Item 2 from file: 621)
DIALOG(R)File 621:(c) 2001 The Gale Group. All rts. reserv.

01048893 Supplier Number: 40132078 (USE FORMAT 7 FOR FULLTEXT)
ELMWOOD INTRODUCES THE ACCUMISTOR SERIES
August 6, 1987
Word Count: 565

... RI 02914
401/438-0614

Contact: Diedre A. Cowan

ELMWOOD INTRODUCES THE ACCUMISTOR SERIES

Customized Thermistor
Assemblies For Sensing And Heating Applications

PAWTUCKET, R.I., August 6, 1987 -- A new line of customized, ceramic, solid state PTC (Positive Temperature Coefficient) thermistors and thermistor assemblies are now available from Elmwood Sensors Inc. Designated the Accumistor Series, it is designed...

...flow sensing, these probes are suitable for gaseous flow sensing situations. Typical applications include coolantand oil -levels, air flow
and overflow sensing. The devices also have applications in the computer and industrial industries.

The Accumistor Series PTC thermistor
heaters are self-controlling and
selfcompensating devices that eliminate the need for additional thermostats. Because...

...processing industries.

Elmwood Sensors customizes all devices in the Accumistor Series providing design engineers with thermistors and thermistor assemblies, including housings brackets and terminations, that are uniquely tailored to fit their specific applications...

...Pawtucket, R.I., Elmwood Sensors Inc., is a leading
international manufacturer and marketer of PTC thermistors , engineered thermostats, definite purpose contactors and thermal protection devices for commercial, aerospace, automotive, precision and...
PRODUCT NAMES: 3676380 (Thermistors)

7/6,KWIC/94 (Item 1 from file: 624)

DIALOG(R)File 624:(c) 2001 McGraw-Hill Co. Inc. All rts. reserv.

01140376
AEDF Pioneers Hi-Tech Institute: Teens step up to become construction equipment service technicians
May, 1999
Word Count: 1,973 *Full text available in Formats 5, 7 and 9*

TEXT:
... though, students go further. One experiment involves taking different oils, exposing them to cold and heat conditions, then measuring their flow and discussing how the oil would affect an engine's operation. ``We talk about the things that are very applicable...

7/6,KWIC/95 (Item 2 from file: 624)
DIALOG(R)File 624:(c) 2001 McGraw-Hill Co. Inc. All rts. reserv.

0501561
Measure mill coal powder flow with Btu-compensated instrument: Intelligent" sensor monitors mill powder flow to boiler and compensates the result for actual heat energy released. Measuring method was developed in Italy
July, 1993
Word Count: 1,527 *Full text available in Formats 5, 7 and 9*

: Intelligent" sensor monitors mill powder flow to boiler and compensates the result for actual heat energy released. Measuring method was developed in Italy

TEXT:
...of air mass-flow-rate measurements.

-- Calibration in conjunction with other p-c flow-rate measurements (feeder speed, O2 concentration, boiler heat release, fuel-oil equivalence, etc).

Potential advantages of the method are:

-- Real-time mass-flow...

... boiler economizer. This indirect measurement is based on the relation between O2 concentration, coal mass-flow rate, and oil and air mass-flow rate--the coal and oil composition being known, and a constant combustion efficiency assumed.

As Fig 2 shows, the p...

7/6,KWIC/96 (Item 3 from file: 624)
DIALOG(R)File 624:(c) 2001 McGraw-Hill Co. Inc. All rts. reserv.

0001994
Manufacturers' Literature
March 21, 1985
Word Count: 6,092 *Full text available in Formats 5, 7 and 9*

TEXT:
...surfaces to recover waste heat from corrosive and dirty gas streams. The exchanger recovers both sensible and latent heat by condensing water vapor from the gas stream and by operating below the acid and...

... and offshore pipelines. Also shown is the effect of the booster in reducing turbulence in flowing oil and petroleum products to improve pumping efficiencies and produce higher flow rates. Details of the...

7/6,KWIC/97 (Item 1 from file: 636)
DIALOG(R)File 636:(c) 2001 The Gale Group. All rts. reserv.

04973376 Supplier Number: 74028464 (USE FORMAT 7 FOR FULLTEXT)
Equipment News.
April 1, 2001
Word Count: 4030

... which helps prevent accidental equipment damage from unplugged cord driveaways. Available in both optic and thermistor configurations, the Breakaway system uses the same materials as Civacon's standard plug-and-cord...

...life. The Breakaway plug-and-cord system can be ordered for optic (part #7191S) or thermistor (#7391S) configurations.
For full information, contact Civacon, 4304 Mattox Rd, Kansas City MO 64150.
Gauge...Sand/Water Separator Cleans Wastewater
Tanx Distribution Inc has debuted a new line of gravity-flow oil /sand/

7/6,KWIC/98 (Item 2 from file: 636)
DIALOG(R)File 636:(c) 2001 The Gale Group. All rts. reserv.

03180809 Supplier Number: 46515744 (USE FORMAT 7 FOR FULLTEXT)
NEW TECHNOLOGY:Thermal Dispersion Probe for Oil Pump
July 1, 1996
Word Count: 469

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...need, especially for older wells, to control pumping action in response to changing rates of oil flow to the surface. Attempts to accurately match pump jack operation to the rate of oil flow have proven difficult.
... oil well. The controller contains a thermal dispersion probe to provide dependable measurements of the oil flow . The controller stops the operation of the pumping unit of the well based on on-line measurement of the oil flow , rather than counting how many times the presence of fluid in the wellbore is detected...

...thermal dispersion rather than rate of flow. The controller is provided with a pair of thermistors . The thermistors are placed each in a tip of a steel housing, one tip also including a...
...is plugged. As oil passes over the controller, both the cool probe with the first thermistor , and the warm probe with the second thermistor and the heater, measure the temperature of the oil . The higher the flow rate of oil over the probes, the more heat is carried away by the moving fluid and the lower the temperature recorded at the tips. Conversely, the slower the flow of oil , the less heat is carried away by the fluid and the higher the temperature that...

...method overcomes the problems associated with mechanical designs (for example, paddle wheels) used to measure oil flow . Mechanical devices tend to become susceptible to expanding gas, leading to skewed flow results, while impurities in the oil over time tend to clog moving parts.

Other types of sensor based upon thermal dispersion have used a heater (usually a heated resistive coil) and temperature measuring devices such as thermistors . Alternative heat sources are also used, as microwave radiation and transistors. In order to obtain a reliable...

7/6,KWIC/99 (Item 3 from file: 636)
DIALOG(R)File 636:(c) 2001 The Gale Group. All rts. reserv.

03067599 Supplier Number: 46270065 (USE FORMAT 7 FOR FULLTEXT)
Shell insulation product uses new measurement technology too
April 1, 1996
Word Count: 299

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...a new polypropylene-based insulation material by Shell Chemicals UK, for use on sub-sea oil and gas flowlines . Called Carizite (and now transferred to the Shell/Montedison Mentell group), it is a syntactic...
... around a pipe.
Thermal conductivity is an important parameter for quality acceptance and a unique measurment system was developed by HEAT Technology, Stockbridge, UK. Samples for QA testing are prepared in 305mm square blocks in thicknesses...

7/6,KWIC/100 (Item 4 from file: 636)
DIALOG(R)File 636:(c) 2001 The Gale Group. All rts. reserv.

01621191 Supplier Number: 42489361 (USE FORMAT 7 FOR FULLTEXT)
STEAM FLOODING:Texaco Abandons Post-Steam Hot Water Flooding in Kern Field
Nov, 1991
Word Count: 1006

... through a core. A lower value for residual oil saturation means that more of the oil can flow out of the core. Therefore, the researchers are currently concentrating on steam flooding.
The researchers...

...was going on. Now, with tougher economic times, they are studying what actually causes the oil to flow out when steam is injected. The key thing they are focusing on is to get...

...at techniques to better manage heat within the reservoir. This work includes better methods of measuring the heat by increasing the number of temperature observation wells. This temperature data is then used to...

7/6,KWIC/101 (Item 5 from file: 636)
DIALOG(R)File 636:(c) 2001 The Gale Group. All rts. reserv.

01265597 Supplier Number: 41364912 (USE FORMAT 7 FOR FULLTEXT)
Recovery of Oil from Oil-Bearing Formation by Continually Flowing Pressurized Heated Gas Through Channel Alongside Matrix
June, 1990
Word Count: 130

Recovery of Oil from Oil-Bearing Formation by Continually Flowing Pressurized Heated Gas Through Channel Alongside Matrix
... comprises the steps of continually flowing a pressurized heated non-aqueous gas along and in heat exchange relationship with a sensible boundary of the reservoir so as to impart sufficient heat and dissolve

sufficient gas into.

...boundary of the reservoir to mobilize the oil-in-place by decreasing its viscosity; effecting flow of the mobilized oil into one or more collection reservoirs; producing the oil from one or more collection reservoirs...

7/6,KWIC/102 (Item 1 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6817116 INSPEC Abstract Number: A2001-04-4725Q-052
Title: Internal heat transfer to viscoelastic flows through porous media
Publication Date: Oct.-Dec. 2000
Copyright 2001, IEE

Abstract: Heat transfer and pressure drop were measured for flow of water, mineral oil , and aqueous solutions of viscoelastic polymers through a vertical tube filled with porous media. The...

7/6,KWIC/103 (Item 2 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6410064 INSPEC Abstract Number: A2000-01-4715F-001
Title: Laminar-turbulent transition in a Mach 8 elliptic cone flow
Publication Date: Sept. 1999
Copyright 1999, IEE

...Abstract: 1 cross section. Extensive flow visualization was carried out experimentally, including schlieren photography and surface oil -flow visualization. Mean pressure and heat flux were measured at the wall of the wind tunnel model. For comparison with the experiments, a computation...
...Identifiers: surface oil -flow visualization...

7/6,KWIC/104 (Item 3 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6404546 INSPEC Abstract Number: A1999-24-4725Q-031
Title: Heat transfer in the packing layer under conditions of high-frequency electromagnetic field
Publication Date: July-Aug. 1999
Copyright 1999, IEE

Abstract: Average heat transfer coefficients are measured for the first time under conditions of transformer oil flow past a solitary sphere and packing layer under the effect of an electromagnetic field with ...
...Identifiers: transformer oil flow ;

7/6,KWIC/105 (Item 4 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6353358 INSPEC Abstract Number: B1999-10-7230-060, C1999-10-3340D-001
Title: A simple transducer using PTC thermistor for oil flow control

Publication Date: 1997
Copyright 1999, IEE

Title: A simple transducer using PTC thermistor for oil flow control
Abstract: A positive temperature coefficient thermistor with nominal temperature T/sub N/=120 degrees C was used to construct a transducer for oil flow control in high power hydraulic presses. Since for this particular application the current-voltage characteristics are used, this characteristic was measured in "still" and "flowing " oil states at 25 degrees C and 80 degrees C. The results show that the current...
...Descriptors: thermistors ;
Identifiers: PTC thermistor ; ...

...oil flow control...

...positive temperature coefficient thermistor ;

7/6,KWIC/106 (Item 5 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6078380 INSPEC Abstract Number: A9824-4725F-007
Title: Effects of Mach number on turbulent separation behaviours induced by blunt fin
Publication Date: Sept. 1998
Copyright 1998, FIZ Karlsruhe

...Abstract: induced by blunt fin has been carried out at M/sub infinity /=7.8 using oil flow visualization and simultaneous measurements of fluctuating wall pressure and heat transfer. This paper presents the effects of Mach number on turbulent separation behaviours induced by...
...Identifiers: oil flow visualization

7/6,KWIC/107 (Item 6 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

5971139 INSPEC Abstract Number: A9816-4740N-004
Title: Heating characteristics of blunt swept fin-induced shock wave turbulent boundary layer interaction
Publication Date: May 1998
Copyright 1998, IEE

...Abstract: for a Reynolds number range of (1.0~4.7)*10/sup 7//m. Detailed heat transfer and pressure distributions were measured at fin deflection angles of up to 30 degrees for a sweepback angle of 67.6 degrees . Surface oil flow patterns and liquid crystal thermograms as well as schlieren pictures of fin shock shape were...

... plateau region followed by a distinct dip and local peak close to the fin foot. Measurements of the plateau pressure and heat transfer were in good agreement with existing prediction methods, but pressure and heating peak measurements...

7/6,KWIC/108 (Item 7 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

4801478 INSPEC Abstract Number: A9423-4780-008

Title: Surface oil flow technique and liquid crystal thermography for flow visualization in impulse wind tunnels
Publication Date: Aug. 1994

Title: Surface oil flow technique and liquid crystal thermography for flow visualization in impulse wind tunnels
Abstract: This paper describes flow visualization techniques employing surface oil flow and liquid crystal thermography suitable for use in impulse wind tunnels. High spatial resolution photographs of oil flow patterns and liquid crystal thermograms have been obtained within test times ranging from 7 to...

...have been shown to be very useful for revealing the detailed features of 3D separated flow . The results from oil flow patterns, liquid crystal thermograms, schlieren photographs and heat flux measurements are shown to be in good agreement.
...Identifiers: surface oil flow ;

7/6,KWIC/109 (Item 8 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

4460055 INSPEC Abstract Number: A9318-4740K-011
Title: Experiments on shock wave/boundary layer interaction in hypersonic flow
Publication Date: 1993

...Abstract: layers at the beginning of the interaction. In each case the phenomena were characterized by oil -flow and heat -sensitive paint visualizations, plus surface pressure and heat -transfer measurements .
...Identifiers: oil -flow ; ...

...heat -sensitive paint visualizations...

...heat -transfer measurements ;

7/6,KWIC/110 (Item 9 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

04334059 INSPEC Abstract Number: A9305-4760-019
Title: Flow visualization and heat transfer measurement in a hypersonic wind tunnel
Publication Date: Jan.-March 1992

Title: Flow visualization and heat transfer measurement in a hypersonic wind tunnel
...Abstract: means of computer simulations only. The need arises for proper wind tunnel testing and detailed heat flux measurements . In this article significant results referring to flow visualizations and heat transfer measurements performed with an infrared (IR) scanning radiometer in a blow-down hypersonic wind tunnel on simple and double ellipsoidal models are discussed. Comparisons of IR data with oil film flow visualizations, thermocouple measurements, and computational predictions are made.
...Identifiers: heat flux measurements ;

7/6,KWIC/111 (Item 10 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts.

reserv.

03491635 INSPEC Abstract Number: A89134432
Title: Aerodynamic heating in shock wave/turbulent boundary layer interaction regions induced by blunt fins
Publication Date: June 1989

...Abstract: pressure and heat transfer rate distributions. Flow fields are visualized by the Schlieren method and oil flow technique. Also the detailed distributions of surface pressure and heat transfer rate are measured in the entire interaction regions. Two significant peaks are observed in the distributions of surface...
...Identifiers: oil flow technique

7/6,KWIC/112 (Item 11 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02689817 INSPEC Abstract Number: B86044262
Title: Fast-response silicon flow sensor with an on-chip fluid temperature sensing element
Publication Date: March 1986

...Abstract: be used in liquid flow as well as gas flow. Its operation is based on heat transfer from the heated sensor to a moving fluid. It has two platinum thin-film resistors, a heating element, and...

... were evaluated theoretically by heat transfer analysis during the chip design. Measurements were made for oil flow velocity of 0-30 cm/s and air flow velocity of 0-14 m/s...
...Identifiers: oil flow velocity

7/6,KWIC/113 (Item 12 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02473051 INSPEC Abstract Number: A85075885
Title: Investigations of the longitudinal flow in corner configurations in the hypersonic regime. II. Corners between swept wedges
Publication Date: Nov.-Dec. 1984

...Abstract: of the pitot pressure, was found. The flow structure near the wall was determined from oil flow pictures, wall pressure and pitot pressure measurements. These show strong vortex flows which are close...

... increasing sweep angle phi . The maximum value of heat flux at the wall was also measured at this reattachment line. The heat flux at the unswept corner is about ten times as high as the heat flux...
...Identifiers: oil flow pictures

7/6,KWIC/114 (Item 13 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02183918 INSPEC Abstract Number: A84019838
Title: Free convective heat-transfer performance of a two-dimensional open thermosyphon with heat sources of cavity dotted along vertical wall
Publication Date: 1984

...Abstract: sources are the heated cavities dotted along the vertical wall. Air is utilized for the measurement of heat transfer, while transformer oil for the observation of the flow patterns. Attention is particularly focussed on the effects of the depth of cavity and the...

7/6,KWIC/115 (Item 14 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02150635 INSPEC Abstract Number: A83118576
Title: Maldistributed inlet flow effects on turbulent heat transfer and pressure drop in a flat rectangular duct
Publication Date: Aug. 1983

...Abstract: by partial blockage of the inlet of a flat rectangular duct were studied experimentally. Local heat transfer coefficients were measured on the principal walls of the duct for two blockages and for Reynolds numbers spanning...

... 30000. Measurements were also made of the pressure distribution along the duct, and the fluid flow pattern was visualized by the oil -lampblack technique. Large spanwise nonuniformities of the local heat transfer coefficient were induced by the...

7/6,KWIC/116 (Item 15 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02098666 INSPEC Abstract Number: A83086006
Title: An experimental study of heat induced surface-tension driven flow
Publication Date: 1982

Abstract: Velocity and temperature measurements are taken of heat induced surface-tension driven flows in both silicone oil and Fluorinert FC-43. Each fluid is contained in an open rectangular box and heated...

... surface. Velocity measurements are obtained for both liquids with a laser anemometer system. For silicone oil the general flow pattern is recorded using time-lapse photography. The surface temperature measurements are taken by a...

7/6,KWIC/117 (Item 16 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02095937 INSPEC Abstract Number: A83076137, B83046155
Title: A volume flow measuring device employing pseudonoise heat impulses
Publication Date: April 1983

Title: A volume flow measuring device employing pseudonoise heat impulses
...Abstract: The applicability of this principle of flow measurement is proved by the determination of the flow rate of diesel oil .

7/6,KWIC/118 (Item 17 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts.

reserv.

01874984 INSPEC Abstract Number: A82065618
Title: An experimental study of the interaction between a glancing shock wave and a turbulent boundary layer
Publication Date: March 1982

...Abstract: 5% thickness of the boundary layer just upstream of the interaction region. The study includes oil flow pictures, vapour and smoke-screen photographs, wall-pressure distributions and local heat -transfer measurements . The results suggest that the complicated interaction region involves two viscous layers: an induced layer...
...Identifiers: oil flow pictures

7/6,KWIC/119 (Item 18 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01705412 INSPEC Abstract Number: A81064548
Title: Turbulent heat transfer coefficients and fluid flow patterns on the faces of a centrally positioned blockage in a duct
Publication Date: March 1981

Abstract: Experiments encompassing both heat -transfer measurements and flow visualization were performed for turbulent flow in a square duct whose cross section...

...coefficients were obtained for both the upstream and downstream faces of the blockage element. The flow visualization, performed with the oil -lampblack technique, revealed the presence of three stagnation zones on the upstream face. The downstream...
...Identifiers: heat -transfer measurements ;

7/6,KWIC/120 (Item 19 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01690878 INSPEC Abstract Number: A81056032
Title: Heat transfer characteristics of inside tube with wavy-shaped inner-fin
Publication Date: Sept. 1980

Abstract: In general heat transfer rates in oil flows are lower than in comparable liquid flows. The paper presents the results of an experimental...

... circular tube containing a number of turbulence promoters among which was wavy-shaped inner-fin. Measurements of the average heat transfer rate and pressure drop were taken across the test section for spindle oil flows .
...Identifiers: oil flows ; ...

...spindle oil flows

7/6,KWIC/121 (Item 20 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01291410 INSPEC Abstract Number: B79006829

Title: Heat transfer efficiency of a rough plate flows of air and transformer oil
Publication Date: 1978

Title: Heat transfer efficiency of a rough plate in flows of air and transformer oil
Abstract: The results are reported of measurements of the heat transfer efficiency of a steel plate with surface roughness simulated by parallel straight protrusions transverse to the flow of air or oil , of height 2.6 mm, length 3 mm and pitch 9 mm.

7/6,KWIC/122 (Item 21 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01274645 INSPEC Abstract Number: A78094725
Title: Laminar flow heat transfer in internally finned tubes with twisted-tape inserts
Publication Date: 1978

Abstract: Heat transfer and pressure drop measurements for laminar flow of oil were made on smooth and internally finned aluminium tubes with twisted-tape inserts. A general...

7/6,KWIC/123 (Item 22 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01203454 INSPEC Abstract Number: A78051172
Title: Experiments on centrifugally driven thermal convection in a rotating cylinder
Publication Date: 15 May 1978

Abstract: Heat -transfer measurements have been carried out in a right circular cylinder of fluid which is heated from...

... whereas in the latter case Ekman layers form and the Coriolis acceleration controls the interior flow . With the 350 cS oil the Nusselt number for heat transfer from the top to the bottom of the cylinder ...

7/6,KWIC/124 (Item 23 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00946713 INSPEC Abstract Number: B76035808
Title: Computed and measured values of local heat flow into the wall of crude- oil fired furnaces
Publication Date: June 1976

Title: Computed and measured values of local heat flow into the wall of crude- oil fired furnaces

7/6,KWIC/125 (Item 24 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00802540 INSPEC Abstract Number: A75065178

Title: Structural features of heat transfer in turbulent flow past a rough plate
Publication Date: Nov.-Dec. 1974

Abstract: The results are presented of measuring the heat transfer and coefficients of correlation of temperature fluctuations (R/sub theta ' theta '/(0,0,r/sub z/)) in the turbulent flow of transformer oil past smooth and rough plates at Pr=72. It was established that, in the case...

7/6,KWIC/126 (Item 25 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00619654 INSPEC Abstract Number: A74024181
Title: Structural peculiarities of heat transfer across turbulent liquid flow on rough plate
Publication Date: 1973

Abstract: The results of heat transfer and space correlation measurements of temperature fluctuations in a turbulent boundary layer on smooth and rough plates in a flow of transformer oil at Pr=72 are presented. In the case of a smooth wall the existence is...

7/6,KWIC/127 (Item 26 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00041408 INSPEC Abstract Number: A69028083
Title: Drag coefficients and transfer factors for spheres in laminar flow
Publication Date: 1968

...Abstract: geometrical and physical system of a /sup 3///sub 4/ in diam. sphere in a flowing oil , overall heat transfer coefficients were also measured by inserting a small heating element into the sphere. These results confirm theoretical predictions that...

7/6,KWIC/128 (Item 27 from file: 2)
DIALOG(R)File 2:(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00012010 INSPEC Abstract Number: B69003878, C69001357
Title: Measurement of the flow velocity of the oil in the ducts of transformers by directly heated bead thermistors
Publication Date: 1968

Title: Measurement of the flow velocity of the oil in the ducts of transformers by directly heated bead thermistors
Abstract: A special application of thermistor anemometry was worked out for measuring the flow velocity of the hot oil in the cooling ducts of the transformer during operation. The relatively wide range of the...

... operation, the inaccessibility of the cooling paths from outside, and the irregular fluctuation of the oil flow of varying temperature led to the development of a new procedure for calibrating the thermistor probes and to the necessity of recording the time- dependent variations in the indications of...

7/6,KWIC/129 (Item 1 from file: 6)

DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

2104069 NTIS Accession Number: PB99-102519/XAB
Annual Conference on Fire Research Held in Gaithersburg, Maryland, on November 2-5, 1998. Book of Abstracts
Oct 98

...Descriptors: protection; Fire detectors; Flame propagation; Burning rate; Combustion kinetics; Combustion products; Combustion chemistry; Plumes; Heat flow ; Compartments; Crude oil ; Ship fires; Radiative heat transfer; Measurement

7/6,KWIC/130 (Item 2 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

2103559 NTIS Accession Number: N19980228035/XAB
Fluorescent-Oil Film Method and Other Techniques for Boundary-Layer Flow Visualization
Mar 59

... use of a temperature-sensitive fluorescent paint and the use of a radiometer that is sensitive to the heat radiation from a surface. Some attention is also given to methods that can be used...
Descriptors: Boundary layer flow ; * Flow visualization; *Oils ; *Ultraviolet radiation; Fluorescence; Radiometers; Sensitivity; Sprayers

7/6,KWIC/131 (Item 3 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

2019069 NTIS Accession Number: PB97-196356
Study of Two Phase High Liquid Loading Jet Fires
(Rept. for 1 Sep 93-30 Aug 94)
Oct 95

... the 10-30 kW range has recently become feasible using a novel effervescent atomizer burner. Measurements of flame length, radiative heat loss fractions, evaporation length, path integrated temperatures, and path integrated and local soot volume fractions...
Descriptors: Blowouts; *Fire tests; Crude oil ; Oil wells; Jets; Flow rate; Soot; Spraying; Methane

7/6,KWIC/132 (Item 4 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1954426 NTIS Accession Number: TIB/B96-02884
Flow visualization and Pitot probe measurements in hypersonic rarefied flow around a 70 Deg half angle cone
Feb 95

... 8.3.10(-3). High frequency glow discharge flow visualization photos show the shock shape. Oil flow pictures give the surface streamlines. Liquid crystal surface temperature visualization gives lines of constant heat...
Descriptors: Rarefied gases; *Hypersonic flow; *Flow visualization; *Nose cones; *Wind tunnel models; Pressure measurement; Pressure sensors ;

Knudsen flow; Liquid crystals; Heat transfer; Glow discharges; Color photography; Wind tunnel tests; Shock waves

7/6,KWIC/133 (Item 5 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1921186 NTIS Accession Number: N96-11221/4
Analysis of Advanced Solid Rocket Motor Ignition Phenomena
(Final Report)
25 Jul 95

...the effects of using a center port in conjunction with multiple canted igniter ports. The flow field measurements include oil smear data on the star slot walls, pressure and heat transfer coefficient measurements on the star slot walls and velocity measurements in the star slot.

7/6,KWIC/134 (Item 6 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1720995 NTIS Accession Number: TIB/B93-00423
Experimentelle Untersuchung zur Stossgrenzschicht-Wechselwirkung im Hyperschall mittels IR-Thermovision. Nr. 1, Teilprojekt B2. (Experimental investigation into the shock boundary layer interaction in hypersonic flow using IR thermovision. No. 1, subproject B2)
1992

... shock generator generated a shock wave entering into interaction with the laminar plate boundary layer. Oil -film flow patterns and infrared images revealed flow separations and stripe structures which are due to longitudinal...
Descriptors: Shock wave interaction; *Boundary layers; *Infrared imagery; *Temperature measurement ; *Thermal stresses; *Hypersonic heat transfer; Laminar boundary layer; Boundary layer separation; Goertler instability; Vortices; Heat transmission; Hypersonic flight; Flat...

7/6,KWIC/135 (Item 7 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1633089 NTIS Accession Number: N92-15002/8
Infrared Measurements of Aerodynamic Heating in Hypersonic Wind Tunnel
cJul 91

Significant results referring to flow visualizations and heat transfer measurements performed by means of an infrared scanning radiometer in a blowdown hypersonic wind tunnel on...

... space program Hermes to develop the first European space shuttle. Comparisons of infrared data with oil film flow visualizations, thermocouple measurements and numerical results are presented.

7/6,KWIC/136 (Item 8 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1208293 NTIS Accession Number: PB86-100591

Introduction to Ground-Water Tracers
(Final rept. Sep 82-Dec 84)
Mar 85

Descriptors: Ground water; *Hydrogeology; *Water pollution; Field tests; Water table; Injection wells; Ground water recharge; Detection ; Water wells; Design; Ions; Laboratories; Heat flow ; Fuel oils ; Dyes; Water flow ; Toxicity; Hydraulic conductivity; Concentration(Composition)

7/6,KWIC/137 (Item 9 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1055686 NTIS Accession Number: DE83750666
Measuring the Utilization Degree of Oil-Heated Central Heating Boilers
Aug 82

Descriptors: Oil Furnaces; Space Heating; Field Tests; Boilers; Measuring Methods; Efficiency; Oil Burners; Heat Losses; Flow Rate; Performance; Exhaust Gases; Temperature Dependence; Errors; Heat Flow; Availability; Flue Gas; Calculation Methods

7/6,KWIC/138 (Item 10 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1050489 NTIS Accession Number: NVO-1558-6
Preliminary Definition of the Geothermal Resources Potential of Pennsylvania
Jan 79

... associated with deep convection in the folded Appalachians or deep sources in the Appalachian Basin. Heat flow measurements and temperature gradients from oil and gas wells suggest normal continental heat flow in Pennsylvania. Under such conditions temperatures of...

7/6,KWIC/139 (Item 11 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0939623 NTIS Accession Number: PB82-142993/XAB
Experimental Heat Transfer Coefficients for the Cooling of Oil in Horizontal Internal Forced Convective Transitional Flow
May 81

Descriptors: Pipe flow ; * Oils ; Heat transfer coefficient ; Temperature measurement ; Fluid flow; Transition flow; Flow measurement; Reynolds number

7/6,KWIC/140 (Item 12 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0895715 NTIS Accession Number: PB81-180267/XAB
Effects of Test Fluid Composition and Flow Rates on the Thermal Efficiency of Solar Collectors
(Final rept)
Aug 80

... collector thermal performance was lowered significantly for high concentrations of glycol and mineral-base oil. Heat losses measured with oil were less than the losses measured from the ASHRAE prescribed procedures.
Descriptors: Thermal efficiency; Heat transfer; Antifreezes; Mineral oils ; Flow rate

7/6,KWIC/141 (Item 13 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0831428 NTIS Accession Number: FE-2246-10/XAB
Testing and Evaluation of MHD Materials and Substructures. Quarterly Technical Progress Report, October-December 1978
Jan 79

Descriptors: Coal-fired mhd generators; Bench-scale experiments; Boilers; Coal; Combustion products; Enthalpy; Fluid flow ; Fuel oils ; Heat transfer; Materials testing; Measuring instruments; Mhd power plants; Nitrogen oxides; Plasma diagnostics; Research programs; Seed-slag interactions; Simulation; Slags...

7/6,KWIC/142 (Item 14 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0726136 NTIS Accession Number: SAND-77-1528/XAB
Solar Total Energy Test Facility Project Test Results: High-Temperature Thermocline Storage Subsystem
Apr 78

Descriptors: Thermal energy storage equipment; *Total energy systems; Oils ; Water; Convection; Cost; Diffusers; Flow regulators; Heat losses; Heat transfer; Heat transfer fluids; Performance testing; Sensible heat storage; Solar energy; Stability; Stratification; Systems analysis; Tanks; Temperature distribution; Temperature gradients; Temperature monitoring; Test...

7/6,KWIC/143 (Item 15 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0591665 NTIS Accession Number: N76-33445/7/XAB
The Measurement of Heat Transfer Rates to Film Cooled External Surfaces and the Internal Passages of Turbomachine Components under Transient Conditions Using Thin Film Gauges
Apr 76

The Measurement of Heat Transfer Rates to Film Cooled External Surfaces and the Internal Passages of Turbomachine Components under...
The use of thin film gages for measuring heat transfer rate of turbomachine components under transient conditions is dealt with, and the cost benefits...

... vanes. Blades instrumented for heat transfer rate and pressure distribution were tested and conventional surface (oil drop) and flow field (shadow, schlieren) visualization used to prove the quality of the flow. A second free...

7/6,KWIC/144 (Item 16 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0575486 NTIS Accession Number: AD-A029 999/0/XAB
Experimental Investigation of a Fin-Cone Interference Flow Field at Mach 5
(Technical rept)
8 Apr 76

... flow visualization results to illustrate the flow structure, and (3) obtaining a data base of heat -transfer and surface-pressure measurements upon which to develop future analytical relations to predict peak interference heating levels. Tests were...

... per foot. A fin-cone model was used. The data consist of surface-pressure distributions, heat -transfer measurements using the phase-change paint technique, and schlieren and oil -flow photographs. Results are presented for several fin-cone geometries to include fin sweep and fin...
Identifiers: Fin body configurations; *Interference heating; Oil flow patterns; Phase change paints; NTISDODXA

7/6,KWIC/145 (Item 17 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0544332 NTIS Accession Number: N76-15405/3/XAB
Heat -Flux Gage Measurements on a Flat Plate at a Mach Number of 4.6 in the Vsd High Speed Wind Tunnel, a Feasibility Test (LA28)
Dec 75

Heat -Flux Gage Measurements on a Flat Plate at a Mach Number of 4.6 in the Vsd High...
... of defining boundary layer characteristics at supersonic speeds in a high speed blowdown wind tunnel. Flow visualization techniques (using oil) were employed. Tabulated data (computer printouts), a test facility description, and photographs of test equipment...
Descriptors: Boundary layer flow; * Heat measurement ; *Measuring instruments; *Wind tunnel tests; Blowdown wind tunnels; Flow visualization ; Photographs; Supersonic flow; Supersonic test apparatus...

7/6,KWIC/146 (Item 18 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0490643 NTIS Accession Number: PB-239 305/6/XAB
Forced Cooling of Underground Electric Power Transmission Lines. Part I. Cooling of Underground Transmission Lines: Heat Transfer Measurements
(Yearly rept)
Jan 74

Forced Cooling of Underground Electric Power Transmission Lines. Part I. Cooling of Underground Transmission Lines: Heat Transfer Measurements
Descriptors: Power transmission lines; *Liquid cooling; Coolants; Oils ; Fluid flow ; Heat transfer; Thermal measurements ; Subsurface structures

7/6,KWIC/147 (Item 19 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0443726 NTIS Accession Number: N74-19907/6/XAB
Experimental Study of Sharp and Blunt Nose Streamwise Corners at Mach 20
Apr 74

Extensive heat transfer and pressure distribution data and oil flow studies on sharp and blunt-nose streamwise corners at Mach 20 in helium are presented...

...Parameters used to correlate blunt shock growth can be used to correlate features of the flow field observed in oil flow photographs in addition to the measured pressure and heat transfer distributions on the models. The flow field structure is described from available experimental data...

7/6,KWIC/148 (Item 20 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0328840 NTIS Accession Number: AD-743 903/XAB
Experimental Investigations of a Fin Protuberance Partially Immersed in a Turbulent Boundary Layer at Mach 5
21 Jan 72

... in a turbulent boundary layer of about 2.6 inches thickness. In addition, pressure and heat transfer measurements were obtained on the flat plate upon which the fin was mounted. Oil smear, azobenzene and Schlieren flow visualization tests were made. (Author)

7/6,KWIC/149 (Item 21 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0208126 NTIS Accession Number: N69-38924/XAB
Continuous and Automatic Measurement of Calorific Value of Heavy Oil by the Use of Neutron
Aug 69

Descriptors: Heat measurement ; *Moderation (energy absorption); *Neutron thermalization; *Oils ; *Pipe flow ; Calorimeters; Heavy ions; Neutron counters

7/6,KWIC/150 (Item 22 from file: 6)
DIALOG(R)File 6:Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0063698 NTIS Accession Number: N66-32682/XAB
Development Test Report for Saturn V Hydrodynamic Support
Nov 65

...Descriptors: mechanics; *Function test; *Hydrodynamics; *Saturn v launch vehicle; Air; Bearing; Capillary; Component; Contact; Control; Float ; Flow ; Fluid; Function; Hydraulic; Interface; Mechanics; Oil ; Pressure ; System; Test; Thermistor ; Valve

7/6,KWIC/151 (Item 1 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05614873
Title: Augmentation of convective heat transfer inside tubes with three-dimensional internal extended surfaces and twisted-tape inserts
Publication Year: 2000

...Abstract: study the heat transfer and friction characteristics for water, ethylene glycol, and ISO VG46 turbine oil flowing inside four tubes with three-dimensional internal extended surfaces and copper continuous or segmented twisted...

...convective heat transfer for the laminar tubeside flow of highly viscous fluid. For the laminar flow of VG46 turbine oil , the average Stanton number could be enhanced up to 5.8-fold inside tubes with...
Descriptors: Heat convection ; Tubes (components); Friction; Water; Glycols; Turbines; Prandtl number; Reynolds number; Laminar flow; Viscous flow

7/6,KWIC/152 (Item 2 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05577870
Title: Analysis of convective heat transfer during immersion frying
Publication Year: 2000

...Abstract: frying showed a highly complex system of free and forced convection augmented by boiling conditions. Oil flow was found to be driven downward by buoyancy forces due to cooling at the sample...

...m**2 degree C and to be strongly coupled with bulk movement of the oil. Heat flux measurements found a peak flux of nearly 30,000 W/m**2. Based on analysis of...

7/6,KWIC/153 (Item 3 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05523823
Title: Heat transfer and pressure drop for porous flow
Conference Title: Emerging Technologies in Fluids, Structures, and Fluid/Structure Interactions - 1999 (The ASME Pressure Vessels and Piping Conference)
Publication Year: 1999

Abstract: Heat transfer and pressure drop were measured for flow of water and mineral oil through a vertical tube filled with porous medium. The tube was heated by passing direct...
Descriptors: Pipe flow ; Flow of water; Mineral oils ; Forced convection; Pressure drop; Porous materials; Reynolds number; Prandtl number; Friction; Porosity

7/6,KWIC/154 (Item 4 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05391966
Title: Piloted ignition of a slick of oil on a water sublayer: The effect of weathering

Conference Title: Proceedings of the 1998 27th International Symposium on Combustion
Publication Year: 1998

Descriptors: Ignition; Crude petroleum; Water; Oil spills; Heat radiation; Temperature measurement ; Flow visualization; Mathematical models; Environmental testing; Heat flux

7/6,KWIC/155 (Item 5 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05331189
Title: Heating characteristics of blunt swept tin-induced shock wave turbulent boundary layer interaction
Publication Year: 1998

...Abstract: a Reynolds number range of (1.0-4.7 multiplied by 10**7/m. Detailed heat transfer and pressure distributions were measured at fin deflection angles of up to 30 degree for a sweepback angle of 67.6 degree . Surface oil flow patterns and liquid crystal thermograms as well as schlieren pictures of fin shock shape were...

7/6,KWIC/156 (Item 6 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05194696
Title: Fluid temperature and film coefficient prediction and measurement in mechanical face seals - experimental results
Publication Year: 1998

...Abstract: ring were also measured. Tests were run at various speeds, flush flow rates, and flush flow directions in water and oil . Details of the experimental apparatus, procedure, operating conditions, and the test results are summarized in...
Descriptors: Seals; Radial flow; Axial flow; Heat transfer; Temperature measurement ; Computational fluid dynamics; Mathematical models; Interfaces (materials); Heat losses

7/6,KWIC/157 (Item 7 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05097394
Title: Impingement heat transfer by jet issuing from a cross-shaped nozzle
Publication Year: 1998

...Abstract: different circumferential positions were calculated using the wall temperatures measured by means of thermocouples, and flow patterns were observed using an oil -titanium IV oxide method. The isotherms of the infrared images were also measured using an...
Identifiers: Cross shaped nozzle; Indium antimony sensors ; Impingement heat transfer

7/6,KWIC/158 (Item 8 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

05012019
Title: Warmeubergangsmessung am Modell eines Raumtransportsystems in

supersonischer Stromung
Title: Heat transfer measurements on a model of a space transportation system in supersonic flow
Publication Year: 1997

Title: Heat transfer measurements on a model of a space transportation system in supersonic flow
Abstract: This work deals with heat transfer measurements at the ELAC configuration at supersonic speeds. The influence of the laminar to turbulent transition and the lee side vortices on the heat transfer distribution is shown. For local heat transfer measurements thin film sensors are utilized. The accuracy of the results is checked with the aid of measurements on...

...flat plate and a comparison with an approximate solution is made. The results of the heat transfer measurements are compared with results of a numerical simulation of the laminar flow around ELAC 1 using parabolized Navier-Stokes equations and Euler boundary layer solution. Heat transfer distributions are measured by temperature sensitive liquid crystals. Values measured by thin film sensors are used for simultaneous...

...The flow pattern near the surface of the model is visualized additionally by means of oil flow patterns and a laser light sheet arrangement. (Author abstract) 96 Refs.
Descriptors: Spacecraft; Heat transfer; Thermal variables measurement ; Models; Supersonic flow; Laminar flow; Turbulent flow; Computer simulation; Liquid crystals; Sensors

7/6,KWIC/159 (Item 9 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04961567
Title: Local and mean heat transfer coefficients along the internal housing walls of aero engine bearing chambers
Conference Title: Proceedings of the 1997 International Gas Turbine & Aeroengine Congress & Exposition
Publication Year: 1997

...Abstract: of secondary air/lubrication oil systems of modern jet engines. For a calculation of lubrication oil flow rates, which should be kept as small as possible in order to reduce parasitic losses...

...latter effect based on engine relevant pressure and temperature levels bearing chamber operating conditions. Air/oil flow heat transfer measurements at the internal bearing chamber walls are described utilizing the temperature gradient method. It is...

...stationary technique based on a two-dimensional finite element calculation procedure. Influences of sealing air flow rate, lubrication oil flow rate and rotational speed on local heat transfer coefficients are discussed. Mean heat transfer coefficients...

7/6,KWIC/160 (Item 10 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04735790
Title: Energy transients in a motored engine during warm-up
Conference Title: Proceedings of the 1995 17th Annual Fall Technical Conference of the ASME Internal Combustion Engine Division. Part 2
Publication Year: 1995

Descriptors: Engine cylinders; Temperature measurement; Energy transfer; Flow measurement ; Lubricating oils ; Heat transfer coefficients; Reynolds number; Fuel economy; Energy absorption

7/6,KWIC/161 (Item 11 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04681001
Title: Petroleum hydrogeology of the Cooper and Eromanga basins, Australia: Some insights from mathematical modeling and fluid inclusion data
Publication Year: 1997

...Abstract: attain peak oil generation in some areas. Computed oil heads also suggest that the Tertiary flow system may have focused oil migration in Eromanga carrier beds for hundreds of kilometers toward structural traps overlying the southern...
Descriptors: Petroleum geology; Hydrology; Computer simulation; Groundwater flow; Brines; Finite element method; Heat convection; Salinity measurement ; Flow patterns; Mathematical models

7/6,KWIC/162 (Item 12 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04493200
Title: Effect of lubricating oil contamination on evaporation in refrigerants R12 and R22
Publication Year: 1996

...Abstract: been made into the effect of oil concentration on evaporation heat transfer coefficients in refrigerant-oil mixtures flowing in a horizontal tube. A new correlation is presented for heat transfer coefficients in convective...

...the results of the present study within approximately plus or minus 20%. The paper reports measurements of evaporation heat transfer coefficients in refrigerants R12 and R22, both oil-free and with two concentrations of...

7/6,KWIC/163 (Item 13 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04414442
Title: Characterization of static electrification in power transformers
Publication Year: 1996

Abstract: Static electrification due to oil flow causes many field failures of large forced-oil cooled power transformers. Also, in practice under...
Descriptors: Electric transformers; Heat conduction; Insulating oil; Electric current measurement ; Thermal effects; Dielectric materials; Electric transformer insulation; Reliability; Interfaces (materials); Ionic conduction

7/6,KWIC/164 (Item 14 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04323543
Title: Heat transfer and flow for a grooved turbine blade tip in a transonic cascade
Conference Title: Proceedings of the 1995 ASME International Mechanical Engineering Congress & Exposition
Publication Year: 1995

...Abstract: blade tip from mid-chord aft. The direction of the leakage was observed with surface flow visualization studies using an oil /dye mixture. Heat flux on the tip cavity floor was successfully measured using a thin-film Heat Flux Microsensor. Results of these measurements are consistent with previous studies performed in the subsonic regime. Convection coefficients were found not...

...the location of interest. The Heat Flux Microsensor also allowed for very rapid sampling of heat flux to measure the unsteady component of the heat transfer. The fluctuating component of heat flux, which can be called heat flux turbulence intensity...
Descriptors: Turbomachine blades; Heat transfer; Transonic flow; Gas turbines; Reynolds number; Pressure; Aircraft engines; Thin films; Heat flux; Sensors

7/6,KWIC/165 (Item 15 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04267336
Title: Energy dissipation in oscillatory flow within a baffled tube
Publication Year: 1995

Abstract: Pressure fluctuations and rates of energy dissipation have been measured for sinusoidal oscillatory flow of light oil in a tube equipped with a series of wall baffles. A laboratory shell-and-tube...
Descriptors: Pulsatile flow; Oscillations; Pipe flow; Energy dissipation; Pressure drop; Pressure measurement ; Heat exchangers; Mathematical models; Mixing

7/6,KWIC/166 (Item 16 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04227822
Title: Endwall heat transfer and aerodynamic measurements in an annular cascade of nozzle guide vanes
Conference Title: Proceedings of the International Gas Turbine and Aeroengine Congress and Exposition
Publication Year: 1995

Title: Endwall heat transfer and aerodynamic measurements in an annular cascade of nozzle guide vanes
Abstract: Aerodynamic and heat transfer measurements have been made on the hub and casing endwalls of an annular cascade of high...

...of Mach number distributions on the endwall surfaces are also presented, along with surface-shear flow visualisation using oil and dye techniques. The heat transfer results are discussed and interpreted in terms of the...

7/6,KWIC/167 (Item 17 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04227534
Title: Two-phase air/ oil flow in aero engine bearing chambers - characterization of oil film flows
Conference Title: Proceedings of the International Gas Turbine and Aeroengine Congress and Exposition
Publication Year: 1995

Title: Two-phase air/ oil flow in aero engine bearing chambers - characterization of oil film flows
...Abstract: flow and heat transfer phenomena under bearing chamber flow conditions is required. The characterization of oil film flows at the bearing chamber walls is one of the major tasks for a better understanding ...
Descriptors: Aircraft engines; Two phase flow ; Air; Lubricating oils ; Heat transfer; Velocity measurement ; Jet engines; Viscosity; Laminar flow; Turbulent flow
Identifiers: Bearing chambers; Oil films; Eddy viscosity; Mass flow

7/6,KWIC/168 (Item 18 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04209644
Title: Optimizing steamflood performance utilizing a new and highly accurate two phase steam measurement system
Conference Title: Proceedings of the International Heavy Oil Symposium
Publication Year: 1995

Descriptors: Oil well flooding; Steam; Injection (oil wells); Heat transfer; Sensors ; Flow of fluids ; Technology; Oil field development; Petroleum reservoir evaluation; Industrial economics

7/6,KWIC/169 (Item 19 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04144302
Title: Development and application of a wellbore/reservoir simulator for testing oil wells
Conference Title: Proceedings of the 9th Middle East Oil Show & Conference. Part 2 (of 2)
Publication Year: 1995

...Abstract: comprehensive coupled wellbore/reservoir simulator was developed to study the behavior of a single-phase oil flow in the wellbore. The wellbore was modeled numerically in which mass, momentum, and energy of...
Descriptors: Oil well testing; Mathematical models; Flow of fluids; Heat conduction; Heat convection; Heat losses; Sensitivity analysis; Seawater; Thermal conductivity of liquids; Heat storage

7/6,KWIC/170 (Item 20 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04045387
Title: Sur les effets thermiques dans les interactions onde de choc/couche limite en ecoulement hypersonique
Title: Thermal effects in shock wave/boundary layer interactions in hypersonic processes
Publication Year: 1994

...Abstract: T//i equals 1.050 K. The phenomena were in each case characterized by surface oil flow visualizations and surface pressure and heat flux measurements . (Author abstract) 34 Refs.

7/6,KWIC/171 (Item 21 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

04015499
Title: MOTHER: a model for interpreting thermometrics
Conference Title: Proceedings of the SPE Annual Technical Conference & Exhibition. Part 1 (of 2)
Publication Year: 1994

Descriptors: Oil wells; Temperature measurement ; Flow of fluids; Heat transfer; Boreholes; Cooling; Porous materials; Thermal effects; Friction; Mathematical models

7/6,KWIC/172 (Item 22 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03977838
Title: Aspects of wellbore heat transfer during two-phase flow
Publication Year: 1994

Descriptors: Boreholes; Oil wells; Heat conduction; Two phase flow ; Thermal diffusion; Heat convection; Mathematical models; Sensitivity analysis

7/6,KWIC/173 (Item 23 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03892512
Title: Use of simulators in the design of an experiment for steam injection into a fractured system
Conference Title: Proceedings of the 9th Symposium on Improved Oil Recovery
Publication Year: 1994

Descriptors: Injection (oil wells); Steam; Computer simulation; Fracturing (oil wells); Petroleum reservoirs; Transfer functions; Flow measurement ; Pressure measurement ; Mathematical models; Heat transfer

7/6,KWIC/174 (Item 24 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03885135
Title: Influence of high rotational speeds on heat transfer and oil film thickness in aero-engine bearing chambers
Publication Year: 1994

...Abstract: techniques for the determination of heat transfer characteristics. In the present study, film thickness and heat transfer measurements have been carried out for the complex two-phase oil /air flow in bearing chambers. In order to ensure real engine conditions, a new test facility has...

...maximum flow temperatures of T//m//a//x equals 473 K. Sealing air and lubrication oil flow can be varied nearly in the whole range of

aero-engine applic[redacted]ons. Special interest is...
Descriptors: Air engines; Thermal load; Heat transfer; Rotational flow; Two phase flow ; Speed; Sealants; Air; Films; Lubricating oils
Identifiers: Bearing chambers; Rotational speeds; Flow temperatures; Two phase oil /air flow ; Oil film thickness

7/6,KWIC/175 (Item 25 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03734374
Title: Pressure drop during two-phase flow of pure refrigerants and refrigerant- oil mixtures in horizontal smooth tubes
Conference Title: 29th National Heat Transfer Conference
Publication Year: 1993

Title: Pressure drop during two-phase flow of pure refrigerants and refrigerant- oil mixtures in horizontal smooth tubes
Abstract: A single tube evaporator test facility capable of measuring pressure drop and heat transfer coefficients inside horizontal tubes has been designed and developed. Baseline testing with R-12...

7/6,KWIC/176 (Item 26 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03734371
Title: Pool boiling of HCFC-124/oil mixtures from smooth and enhanced tubes
Conference Title: 29th National Heat Transfer Conference
Publication Year: 1993

Abstract: Measurements of pool-boiling heat -transfer coefficients in HCFC-124 and HCFC-124/oil mixtures with up to 10% (by...
Descriptors: Refrigerants; Boiling liquids; Heat transfer; Fluorocarbons; Lubricating oils ; Mixtures; Pipe flow ; Boundary layers; Tubes (components); Fins (heat exchange)

7/6,KWIC/177 (Item 27 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03592798
Title: Numerical study on the two-phase steam-water flow during the steam injection in petroleum wells.
Conference Title: Winter Annual Meeting of the American Society of Mechanical Engineers
Publication Year: 1992

Descriptors: TWO PHASE FLOW ; OIL WELLS; INJECTION (OIL WELLS); HEAT TRANSFER; PRESSURE MEASUREMENT ; ENHANCED RECOVERY; FLOW MEASUREMENT

7/6,KWIC/178 (Item 28 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03546589
Title: Transient multiphase temperature prediction program.
Conference Title: SPE Annual Technical Conference - 1992
Publication Year: 1992

...Abstract: used primarily to estimate hydrate and paraffin potential

during startup, shutdown, and blowdown in subsea oil/gas flowlines . Other uses include specification of minimum temperature requirements for pipeline materials that may be exposed...
Descriptors: SUBMARINE PIPELINES; UNDERWATER TEMPERATURE MEASUREMENT ; HEAT CONDUCTION; MULTIPHASE FLOW; MATHEMATICAL MODELS; COMPUTER SIMULATION

7/6,KWIC/179 (Item 29 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03492632
Title: Effect of lubricating oil contamination on condensation in refrigerant R22.
Publication Year: 1992

Abstract: An experimental facility is described for the measurement of evaporation and condensation heat transfer coefficients in refrigerant-oil mixtures flowing in a horizontal tube. The paper reports measurements of heat transfer coefficients in convective condensation of R22, both oil-free and with three concentrations of...

7/6,KWIC/180 (Item 30 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03430411
Title: Aerodynamic heating in three-dimensional shock wave turbulent boundary layer interaction induced by sweptback sharp fins in hypersonic flows.
Conference Title: International Pacific Air and Space Technology Conference and 29th Aircraft Symposium Proceedings
Publication Year: 1991

...Abstract: wave/turbulent boundary layer interaction region induced by sweptback sharp fins are investigated carefully by oil flow technique and pressure distribution. The major objectives of the present study are to study the...

...heating phenomena in the flow fields are investigated by using a new technique. For the measurements a new method of measuring heat flux developed by the present authors are used. The new method is based on a...

7/6,KWIC/181 (Item 31 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03397093
Title: Production Operations and Engineering, Pt.2.
Conference Title: Proceedings of the 1991 SPE Annual Technical Conference and Exhibition
Publication Year: 1991

...Abstract: covered. Produced water treatment, NORM management and microbial flooding have been discussed. Fracture diagnostics, wellbore heat loss calculations and flow measurements have also been included.
...Descriptors: Fracturing; OIL WELL COMPLETION; FLOW OF FLUIDS...

7/6,KWIC/182 (Item 32 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03312604

Title: Laminar h transfer in the oil groove of a wet clutch.
Publication Year: 1991

...Abstract: an important effect on the overall heat transfer coefficient between the metal plate and the oil flowing in the groove. Experiments carried out under continuously slipping conditions on an actual clutch are described and the measured overall heat transfer coefficients are compared to the results of the numerical analysis. The agreement between the...

7/6,KWIC/183 (Item 33 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03062966
Title: Proceedings of the 1991 SPE International Thermal Operations Symposium.
Conference Title: Proceedings of the 1991 SPE International Thermal Operations Symposium
Publication Year: 1991

...Abstract: reservoir well repair and environmental impact management of surface discharge; partial exclusion sand control technique; measurement of steam injection tubing heat losses; overview of an instrumented steam injection test program; effect of viscosity and sand thickness on steam-flood performance; steam-solvent injection; two-phase flow -splitting device; heavy-oil dehydration facility; recovery mechanisms; in-situ combustion project performance; thermal conductivity estimation from temperature logs...

7/6,KWIC/184 (Item 34 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

03055548
Title: Experimental heat transfer measurements for pulsatile flow in baffled tubes.
Publication Year: 1990

Title: Experimental heat transfer measurements for pulsatile flow in baffled tubes.
Abstract: We report experimental heat transfer measurements for the flow of a lubricating oil on the tube side of a shell and tube heat exchanger. Results are reported for...

7/6,KWIC/185 (Item 35 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02798153
Title: Aerodynamic heating in the interaction regions of shock waves and turbulent boundary layers induced by sharp fins.
Publication Year: 1989

...Abstract: to investigated the cases of incipient, primary and secondary separation of the boundary layers. Surface flow patterns are visualized by oil -flow technique. The detailed distributions of surface pressure and heat transfer rates are measured in the entire interaction regions. For the measurements of the heat transfer rates, a new type of multi-layered thin-film heat-transfer gauge is developed...

7/6,KWIC/186 (Item 36 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02653810
Title: POSSIBLE TYPES OF FLOW ON LEE-SURFACE OF DELTA WINGS AT SUPERSONIC SPEEDS.
Publication Year: 1988

...Abstract: of 1. 4, 1. 6, 1. 8, 2. 0, 2. 5, and 3. 0, included oil flow visualisations (on both sets of wings) and static pressure distributions (on the thicker wing only...

...normal angle of 40 degree was also tested. The tests on this wing included both oil flow visualisations and static pressure measurements. From these and other existing measurements, the leeside flows have...
...Descriptors: Supersonic; PRESSURE MEASUREMENT ; SPECIFIC HEAT ; SHOCK WAVES; AIRCRAFT...

7/6,KWIC/187 (Item 37 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02628486
Title: HEATING RATE DISTRIBUTIONS AT MACH 10 ON A CIRCULAR-BODY EARTH-TO-ORBIT TRANSPORT VEHICLE.
Conference Title: Thermophysical Aspects of Re-Entry Flows. Technical papers selected from the AIAA 23rd Aerospace Sciences Meeting and the AIAA 20th Thermophysics Conference.
Publication Year: 1986

...Abstract: series of heat-transfer and surface flow tests were conducted. The phase-change paint and oil flow tests were performed in the Langley 31 in. Mach 10 tunnel at angles of attack...

...deg increments. Heat-transfer coefficient data are presented for all angles of attack and detailed oil flow photographs are shown for windward and leeward surfaces at 25 and 40 deg angles of...
Identifiers: EARTH-TO-ORBIT TRANSPORT VEHICLES; HEATING RATE DISTRIBUTIONS; SURFACE FLOW TESTS; HEAT TRANSFER MEASUREMENT TECHNIQUE

7/6,KWIC/188 (Item 38 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02587482
Title: AIR-TO-LIQUID HEAT EXCHANGER SYSTEM FOR VENTILATION HEAT RECOVERY.
Publication Year: 1987

...Abstract: the liquid medium. The exchanger was operated in counterflow. Equations were developed to describe both sensible and latent heat transfer. These equations formed the basis of a mathematical model that predicted heat exchanger performance...

...50. The results were most sensitive to indoor dew point temperature and least sensitive to oil flow rate. (Edited author abstract) 7 refs.

7/6,KWIC/189 (Item 39 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02523026
Title: EXPERIMENTAL INVESTIGATION OF HEAT TRANSFER IN FORCED-CONVECTION

EVAPORATION OF OIL-REFRIGERANT MIXTURES.
Conference Title: ASHRAE Transactions 1986. (Technical Papers Presented at the 1986 Annual Meeting.)
Publication Year: 1986

Abstract: Two-phase local heat transfer measurements are made for forced-convective evaporation of oil-refrigerant (R-12) mixtures inside a horizontal tube. The experimental parameters cover the range of 0%, 2%, and 5% oil by mass flow ; thermodynamic quality range of . 002 to 1; heat flux range of 700 to 20,000...
Identifiers: TWO-PHASE LOCAL HEAT TRANSFER MEASUREMENTS ; FORCED-CONVECTION EVAPORATION; OIL -REFRIGERANT MIXTURES; FLOW PATTERN STUDIES; FLOW PATTERN MAP

7/6,KWIC/190 (Item 40 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02093830
Title: LOCAL HEAT TRANSFER MEASUREMENTS.
Conference Title: Measurement Techniques in Heat and Mass Transfer.
Publication Year: 1985

Title: LOCAL HEAT TRANSFER MEASUREMENTS.
...Abstract: into the plastic base, and for radiation were introduced. A simple way of evaluating local heat transfer is by measuring the loss of substance from a surface layer of naphthalene into an air flow, but it is less accurate. The most preferable technique is based on the measurement of local heat flux densities by a number of small sensors, usually heated by the electric current. In...

...such small sensors. At our Institute we have accumulated large experiences of such simulation in flows of air water and different oils , over wide ranges of thermal loads and flow velocities. (Edited author abstract) 2 refs.

7/6,KWIC/191 (Item 41 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

02037058
Title: STUDY OF THE CHARACTERISTICS OF HEAT RADIATION FROM BALL SCREWS. (1ST REPORT, THE EXPERIMENT FOR EVALUATION OF THE EFFECT OF EXTERNAL FORCED COOLING).
Publication Year: 1986

...Abstract: screw. Therefore the transient temperature changes on the center axis of the ball screw are measured , and the heat transfer coefficient a is calculated using the measured values obtained when the revolution speed of...

...the results of a in the experimental regions on the basis of the appearance of oil flow . (Author abstract) 8 refs. In Japanese.

7/6,KWIC/192 (Item 42 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

01877769
Title: METHODS OF TEMPERATURE RISE CALCULATIONS OF POWER TRANSFORMER WINDINGS.
Conference Title: International Conference on Large High Voltage Electric

Systems, 1984 Session.
Publication Year: 1984

...Abstract: spot temperature calculation methods for disk and layer windings with natural and forced circulation of oil and with directed oil flow . The non-uniform heat generation along the winding and the winding geometry are taken into...
...Descriptors: Temperature Measurement ; HEAT TRANSFER...
Identifiers: HOT SPOT TEMPERATURE CALCULATION METHODS; DIRECT OIL FLOW ; OIL FORCED CIRCULATION; LARGE SCALE CYLINDRICAL WINDING MODEL; NON-UNIFORM HEAT GENERATION

7/6,KWIC/193 (Item 43 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

01599745
Title: INFLUENCE OF OIL ON EVAPORATOR HEAT TRANSFER (RESULTS FOR R 12 AND SHELL CLAVUS 68).
Publication Year: 1984

...Abstract: found that the oil had a significant effect on the refrigerant flow and pressure drop. Measurements made on the heat transfer coefficient indicated that the oil had different effects depending on the fluid flow regime. For annular-wavy regimes, there was no apparent effect, while for annular and film flows , the presence of oil significantly reduced the heat transfer coefficient. The dependence of heat transfer coefficient on refrigerant quality...

7/6,KWIC/194 (Item 44 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

00933915
Title: TRANSFORMER THERMAL DUCT STUDY OF VARIOUS INSULATING FLUIDS.
Publication Year: 1980

...Abstract: design. The fluid properties are modeled as a function of temperature and studied in an oil duct flow model. The study demonstrates the significant impact of both the fluid properties and the duct...
...Descriptors: Measurements ; HEAT TRANSFER

7/6,KWIC/195 (Item 45 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

00504505
Title: WATER RESOURCES INSTRUMENTATION, VOLUME 1: MEASURING AND SENSING METHODS, VOLUME 2: DATA ACQUISITION AND ANALYSIS.
Publication Year: 1974

...Abstract: meters, acoustic measurement, quality control, coagulation processes, luminescence methods, carbon rod atomizers, phenol content, chlorine, thermistor uses, oil in water, remote sensing and data processing, photogrammetry, sampling, monitoring, watersheds, stream quality...

...lineament analysis by satellite images, biological relationships, statistical considerations, organic matter, recreational lakes, chloride reduction, oil spill prevention, and river flow analysis. Selected papers are indexed separately.

7/6,KWIC/196 (Item 46 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

00478905
Title: HEAT TRANSFER AND PRESSURE DROP OF INTERNALLY FINNED TUBES IN LAMINAR OIL FLOW.
Publication Year: 1975

Title: HEAT TRANSFER AND PRESSURE DROP OF INTERNALLY FINNED TUBES IN LAMINAR OIL FLOW.
Abstract: Heat transfer and pressure drop measurements were made on integral inner-fin tubes of several designs in laminar oil flow . Data are presented for eighteen 12. 7 to 32-mm-dia tubes containing from 6...

7/6,KWIC/197 (Item 47 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

00307511
Title: HEAT-TRANSFER MEASUREMENTS FOR CYLINDRICAL CONFIGURATIONS IN HYPERSONIC STREAMS.
Publication Year: 1973

Title: HEAT-TRANSFER MEASUREMENTS FOR CYLINDRICAL CONFIGURATIONS IN HYPERSONIC STREAMS.
...Abstract: the tunnel-wall boundary layer and the bow shock wave. Heat transfer, pressure, and surface oil flow data for these " simulated " infinite cylinders were obtained over an angle-of-attack range from...

7/6,KWIC/198 (Item 48 from file: 8)
DIALOG(R)File 8:(c) 2001 Engineering Info. Inc. All rts. reserv.

00263743
Title: HOT-FILM LOW LOGGING AS APPLIED TO IN SITU OIL SHALE AND MINING EXPERIMENTS.
Publication Year: 1972

Abstract: The hot-film, heat -sensor technique of fluid flow measurement has been developed and is being applied to well logging by the U. S. Bureau of Mines for evaluating in situ fracturing and retorting experiments in Green River oil shale. Wellbore fluid flow profiles and fluid entry or exit points are determined and recorded while raising or lowering...

7/6,KWIC/199 (Item 1 from file: 14)
0315700
Heat transfer measurements on a model of a space transportation system in supersonic flow; Warmeubergangsmessung am Modell eines Raumtransportsystems in supersonischer Stromung 19970000

7/6,KWIC/200 (Item 2 from file: 14)
0195194
Heat transfer in condensing and evaporating two-component, two-phase flow inside a horizontal tube 1985

7/6,KWIC/201 (Item 1 from file: 32)

1230514
Development of a device for measuring the heat-based flow profiles of fluids.
2000

7/6,KWIC/202 (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

05742830 Genuine Article#: WV032 Number of References: 16
Title: Heat transfer enhancement in a convective field by applying ionic wind (ABSTRACT AVAILABLE)
Publication date: 19970000

...Abstract: flow was electro-hydrodynamically induced by the Coulomb force. The visualization of flow patters and measurement of heat transfer coefficient and consuming power were carried out. The theoretical analysis oil electric, flow and temperature field was also performed taking account of momentum transfer between ions and neutral...

7/6,KWIC/203 (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

04836419 Genuine Article#: UL243 Number of References: 20
Title: ENDWALL HEAT-TRANSFER MEASUREMENTS IN AN ANNULAR CASCADE OF NOZZLE GUIDE VANES AT ENGINE REPRESENTATIVE REYNOLDS AND MACH NUMBERS (Abstract Available)

Title: ENDWALL HEAT-TRANSFER MEASUREMENTS IN AN ANNULAR CASCADE OF NOZZLE GUIDE VANES AT ENGINE REPRESENTATIVE REYNOLDS AND MACH NUMBERS
Abstract: Aerodynamic and heat transfer measurements have been made on the hub and casing endwalls of a large (mean diameter 1...

...crystal technique has been employed, which has the advantage of yielding full surface maps of heat transfer coefficient. Aerodynamic measurements of Mach number distributions on the end-wall surfaces are also presented, along with surface-shear flow visualisation using oil and dye techniques. The heat transfer results are discussed and interpreted in terms of the...

7/6,KWIC/204 (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

04409532 Genuine Article#: TB067 Number of References: 11
Title: ANALYSIS OF COMBINED AIR-OIL COOLING EFFECTIVENESS OF DIESEL-ENGINE CYLINDERS (Abstract Available)

...Abstract: engine output increase. Their size and distribution can be levelled by an additional engine lubrication oil jet, flowing through a horizontal channel in the upper part of the cylinder wall.

Analysis of measured...

...flux distribution in the cylinder wall is presented in the paper, together with analysis of measuring errors that influence the heat flux calculation.

7/6,KWIC/205 (Item 4 from file: 34)

DIALOG(R)File 34: 2001 Inst for Sci Info. All rts. reserv.

04318425 Genuine Article#: RV473 Number of References: 34
Title: THERMAL EFFECTS IN SHOCK WAVE/BOUNDARY LAYER INTERACTIONS IN HYPERSONIC PROCESSES (Abstract Available)

...Abstract: and T-i = 1.050 K. The phenomena were in each case characterized by surface oil flow visualizations and surface pressure and heat flux measurements .

7/6,KWIC/206 (Item 5 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

04025627 Genuine Article#: QY649 Number of References: 57
Title: EMISSION AND LASER-INDUCED FLUORESCENCE IMAGING METHODS IN EXPERIMENTAL COMBUSTION (Abstract Available)

...Abstract: and applied to a range of experiments. One particularly useful method is to seed the flow with oil particles and illuminate the domain of interest with a planar sheet of laser light. The...

...a computer for further processing. In some circumstances it is possible to deduce from this measurement the spatial distribution of heat release in the reactive flow. More quantitative data may be gathered with planar laser-induced...

7/6,KWIC/207 (Item 6 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

03539432 Genuine Article#: PL447 Number of References: 46
Title: HEAT-FLOW IN THE KENYA RIFT-ZONE (Abstract Available)

...Abstract: continental rift zones are associated with high heat flow and elevated lithospheric geotherms, but direct heat -flow measurements from young rifts do not clearly define surface heat-flow anomalies associated with deep-seated...

...are presented from traditional heat-flow determinations in water drill-holes, from bottom-hole-temperature measurements in oil wells, and from heat -flow estimates from groundwater silica data. These data define generally low heat flow on the flanks...

...rift zone with local redistribution of this heat by hydrothermal convection. Normal to moderately high heat flow was measured in eastern Kenya between the rift zone and the coast. The regional heat flow in...

7/6,KWIC/208 (Item 7 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

01059213 Genuine Article#: FT071 Number of References: 53
Title: MODELING TILLAGE EFFECTS ON SOIL PHYSICAL-PROPERTIES (Abstract Available)

Research Fronts: 89-1481 004 (UNSATURATED HYDRAULIC CONDUCTIVITY; MODELING SUBSURFACE FLOW ; TRANSPORT IN POROUS-MEDIA; OIL INFILTRATION; DRY SOILS)
89-3387 001 (WHEAT CANOPY; WATER MODEL; SOIL THERMAL REGIMES; SENSITIVITY OF EVAPOTRANSPIRATION; SPARSE PINE FOREST; SENSIBLE HEAT

FLUXES)
89-7761 001 (POTENTIAL EVAPOTRANSPIRATION; SOIL-WATER BALANCE; OAK (QUERCUS-PETRAEA (MATT) LIEBL) IN...

7/6,KWIC/209 (Item 8 from file: 34)
DIALOG(R)File 34:(c) 2001 Inst for Sci Info. All rts. reserv.

00748397 Genuine Article#: ET761 Number of References: 16
Title: A TEMPERATURE PROBE SURVEY ON THE LOUISIANA SHELF - EFFECTS OF BOTTOM-WATER TEMPERATURE-VARIATIONS (Abstract Available)

...Abstract: mi2, with an average grid spacing of less than 1 mi. The purpose was to detect heat flow anomalies due to subsurface fluid flow. However, thermal perturbations due to seasonal variation of...

...detailed survey has been donated to a publicly accessible scientific database, to spur research into heat flow measurement on continental shelves.
...Identifiers--HEAT -FLOW MEASUREMENT ; OCEANIC SEDIMENTS; OIL

7/6,KWIC/210 (Item 1 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

01756182 ORDER NO: AADAA-I9980317
Local measurement and numerical modeling of mass/ heat transfer from a turbine blade in a linear cascade with tip clearance
Year: 2000

Local measurement and numerical modeling of mass/ heat transfer from a turbine blade in a linear cascade with tip clearance

Local mass/heat transfer measurements from the turbine blade near-tip and the tip surfaces are performed using the naphthalene...

...Reynolds number and turbulence intensity (0.2 and 12.0%) are investigated. Two methods of flow visualization—oil and lampblack, laser light sheet smoke wire—as well as static pressure measurement on...

7/6,KWIC/211 (Item 2 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

01631217 ORDER NO: AADNQ-25011
HEAT EXCHANGER FOULING BY PETROLEUM ASPHALTENES
Year: 1997

...The thermal fouling resistances and initial fouling rates were determined from these temperature and power measurements . Heat fluxes of 91-332 kW/m$\sp2$ were used and surface temperatures at time zero...

...temperature of 85$\sp\circ$C was used.
Surface and bulk temperature, solvent type, heavy oil concentration, flow and heteroatom compound effects have been established. Deposit formation increased with increasing surface temperature. For...

7/6,KWIC/212 (Item 3 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

01475126 ORDER NO: AADAA-I9611954
A STUDY OF STEAM INJECTION IN FRACTURED MEDIA (OIL RESERVOIRS)
Year: 1996

...Fine grid simulations were used to study the effects of flow parameters. Among the fluid flow properties investigated, water-oil capillary pressure of the matrix and gas-oil capillary pressure of the fracture were found...

...continuous steam drive experiments were performed on systems containing water. Saturation and temperature distributions and heat fluxes were measured . Using a CT scanner, saturations were measured in-situ in the fractures and the consolidated...

...However, when pressure cycling was simulated, steam saturation did develop.

Finally, simulations were performed with oil present. Steam only flowed in the fracture. Recovery was mainly due to water imbibition. When cyclic steam injection was...

7/6,KWIC/213 (Item 4 from file: 35)

01379441 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
FLOW BOILING OF PURE AND OIL CONTAMINATED REFRIGERANTS: HEAT TRANSFER AND PRESSURE DROP IN A HORIZONTAL TUBE
Year: 1993

FLOW BOILING OF PURE AND OIL CONTAMINATED REFRIGERANTS: HEAT TRANSFER AND PRESSURE DROP IN A HORIZONTAL TUBE

...with HCFC22. The thesis also contains an investigation of the effect of different ester based oils in flow boiling of HFC134a. The results are compared to existing correlations.

The tests are carried out...

...three oils are approximately 29 cSt, 32 cSt at 40$\sp\circ$C respectively.

The measured heat transfer coefficients and the pressure drop are compared to the estimates from correlations available in...

...and the correlation according to Shah (1982) are found to agree reasonably well with the measured heat transfer coefficients for oil free refrigerant. The influence of the Reynolds number on the heat...
...Pierre (1957b), Gronnerud (1972), Friedel (1979) and Paliwoda (1989). Only the total pressure drop is measured .

The heat transfer of oil contaminated refrigerant is found to be lower than for the pure refrigerant...

7/6,KWIC/214 (Item 5 from file: 35)

01110223 ORDER NO: AADDX-88866
THERMOFLUID EFFECTS OF LUBRICATING OIL IN HEAT PUMP SYSTEMS
Year: 1989

...were kept constant at 2500 W/m$\sp2$ and 155 kg/m$\sp2$s respectively. Measured heat transfer coefficients were in the range 1400 to 3900 W/m$\sp2$K. Results showed...

...heat transfer coefficient by 12%, but 10% oil returns the coefficient to oil-free values.

Measurements were made of condensation heat transfer coefficients in Refrigerant 22 at three oil concentrations up to 10% and oil -free, using the same tube, flow rate and heat flux as in the evaporation experiments. Condensation temperatures were 40$\sp\circ...

7/6,KWIC/215 (Item 6 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

1034578 ORDER NO: AADD--83740
UNSTEADY AERODYNAMICS AND HEAT TRANSFER IN A TRANSONIC TURBINE STAGE
Year: 1987

...interactions, using a method of simulation established in the Isentropic Light Piston Tunnel at Oxford. Measurements of heat transfer rates and pressures are presented, supported by flow visualisation methods such as surface oil -dots and schlieren photography, for two examples of high-pressure turbine rotor blades. The majority...

...film cooling process.

The transition process is examined in detail by use of wide bandwidth heat transfer measurements , and a new method derived for modelling this process. It has been possible to observe...

7/6,KWIC/216 (Item 7 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

807297 ORDER NO: AAD83-08100
TURBULENT TUBE-FLOW HEAT TRANSFER COEFFICIENTS IN THE PRESENCE OF FLOW IMBALANCE IN THE TUBES OF A PARALLEL ARRAY
Year: 1982

...circumferential distributions of the heat transfer coefficient in the thermal entrance region. Depending on the measurement site, the heat transfer coefficients were either enhanced or diminished due to the flow imbalance. The fully developed...

...tends to diminish the heat transfer coefficients.

The heat transfer experiments were supplemented by the flow visualization experiments using the oil -lampblack technique. The visualization revealed important features of the flow such as flow separation, reattachment...

7/6,KWIC/217 (Item 8 from file: 35)
DIALOG(R)File 35:(c) 2001 ProQuest Info&Learning. All rts. reserv.

779096 ORDER NO: AAD82-11518
CORRUGATED-DUCT HEAT TRANSFER, PRESSURE DROP AND FLOW VISUALIZATION
Year: 1981

...with a specially constructed apparatus made out of plexiglass, which was fitted with pressure taps.

Flow visualization, carried out using the oil -lampblack technique, revealed a very unconventional flow pattern including large zones of recirculation adjacent to...

...determined, exhibited periodic behavior, indicating a periodic fully-developed flow. Nusselt numbers, determined from the measured heat

flux and wall-to-[redacted]k temperature difference, when correlated, resulted in a Reynolds-number dependence...

7/6,KWIC/218 (Item 1 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

04383373 JICST ACCESSION NUMBER: 99A0924016 FILE SEGMENT: JICST-E
Heat Transfer Characteristics by Impingement Jets Issuing from Dual Elongated Slot Nozzles., 1999

...ABSTRACT: were investigated experimentally when the dual slot jets impinge on the target plate. The local heat transfer distributions were measured for various spacings at small nozzle-to-plate separation distances and the flow pattern also visualized by the oil -titanium IV oxide method. An infrared radiometer with a two-dimensional array of InSb sensor...

7/6,KWIC/219 (Item 2 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

04070567 JICST ACCESSION NUMBER: 99A0433048 FILE SEGMENT: JICST-E
Measurement and analysis instrument used for production and testing of lubricating oil Types and purposes of measurement and analysis of lubricating oil With the aim of improving the evaluation technique, 1999

ABSTRACT: The factors to be examined at the time of new-product development of lubricating oil , is shown in a flow diagram. The instruments used for measurement of properties and performances of lubricating oil are described...

...copper plate corrosion test, etc. are explained. As to each kind of performance testing instruments, measurement of heat /oxidation stability, measurement of abrasion resistance and load resistance, and other measurement of performance are explained. Practical performance...

7/6,KWIC/220 (Item 3 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

03651942 JICST ACCESSION NUMBER: 98A0719885 FILE SEGMENT: JICST-E
Flow Behavior of, and Heat Transfer to, a Liquid Fed onto Wires Hanging Down in a Gas Stream., 1998

ABSTRACT: This paper describes an experimental examination of a novel scheme of sensible heat recovery from a hot gas stream by means of a direct gas-to-liquid contact...

...investigate the heat transfer from an upward vertical flow of heated air to a counter flow of a silicone oil down a single wire vertically hung in the air flow. (author abst.)

7/6,KWIC/221 (Item 4 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

02813953 JICST ACCESSION NUMBER: 96A0816804 FILE SEGMENT: JICST-E
Influence of Oil on Boiling Heat Transfer for Film Flow of Refrigerant Liquid., 1996

ABSTRACT: Boiling heat transfer coefficient was measured for refrigerant liquid with oil contained. The liquid flowed in film on a horizontal heating surface with the vapor flowing in the upper part of a rectangular duct at different liquid flow rates, vapor flow rates, heat fluxes and oil mass fractions. Whenever the refrigerant contained the oil , the flow with foaming action was observed. The heat transfer coefficient was always decreased with increasing oil...

7/6,KWIC/222 (Item 5 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

02693255 JICST ACCESSION NUMBER: 96A0403412 FILE SEGMENT: JICST-E
Boiling Heat Transfer for Film Flow of Refrigerant Liquid with Oil Contained., 1996

Boiling Heat Transfer for Film Flow of Refrigerant Liquid with Oil Contained.
ABSTRACT: Boiling heat transfer coefficient was measured for film flow of refrigerant liquid with oil contained on horizontal heating surface. The liquid film flowed together with the vapor in a...

7/6,KWIC/223 (Item 6 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01660899 JICST ACCESSION NUMBER: 93A0011133 FILE SEGMENT: JICST-E
A Study on Aerodynamic Heating Phenomena in Bow Shock Wave/Turbulent Boundary Layer Interaction Region., 1992

...ABSTRACT: plate to a blunt body, the effect of the height is researched by use of oil flow technique, surface pressure measurements and surface heat flux measurements . The results show that the displacement has a major impact on the interaction region. Moreover...

7/6,KWIC/224 (Item 7 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01619383 JICST ACCESSION NUMBER: 92A0764876 FILE SEGMENT: JICST-E
A Study on the Impinging Two-Dimensional Jet to a Circular Cylinder. 2nd Report. Measurements of Heat Transfer around a Circular Cylinder influenced by Two Flat Plates., 1992

A Study on the Impinging Two-Dimensional Jet to a Circular Cylinder. 2nd Report. Measurements of Heat Transfer around a Circular Cylinder influenced by Two Flat Plates.
...ABSTRACT: decreased on account of the flat plates. The results of both the pressure profile and flow observed by oil -film metod around the cylinder conform to above mentioned resuls for the heat transfer. (author...

7/6,KWIC/225 (Item 8 from file: 94)

DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01508388 JICST ACCESSION NUMBER: 92A0241560 FILE SEGMENT: JICST-E
A study of three-dimensional shock wave/turbulent boundary layer interaction induced by sweptback sharp fins in hypersonic flows., 1991

...ABSTRACT: wave/turbulent boundary layer interaction region induced by sweptback sharp fins are investigated carefully by oil flow technique, pressure and heat flux measurments . The major objectives of the present study are to study the effects of the shape...

7/6,KWIC/226 (Item 9 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01449662 JICST ACCESSION NUMBER: 92A0223084 FILE SEGMENT: JICST-E
Experiments of Evaporative Heat Transfer of CFC12 and HFC134a and the Behavior of Refrigerant Oil., 1992

...ABSTRACT: of the condenser. The evaporation temperature was about 0.DEG.C., and qualities at the measuring point of the heat transfer coefficients changed from about 0.3 to 1.0. Measurements and observations showed clearly the effects of oil miscibility and oil concentration on the flow patterns and heat transfer. (author abst.)

7/6,KWIC/227 (Item 10 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01124036 JICST ACCESSION NUMBER: 90A0811975 FILE SEGMENT: JICST-E
A study of aerodynamic heating in the interaction regions of shock waves and turbulent boundary layers induced by sweptback blunt fins., 1990

...ABSTRACT: heat flux distributions. The flow fields have been visualized by the Schlieren technique and the oil flow technique, and the detailed streamwise distributions of surface pressure and heat transfer rate are measured for a wide range of the interaction region. The results show that the extent of...

7/6,KWIC/228 (Item 11 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

01079852 JICST ACCESSION NUMBER: 90A0720396 FILE SEGMENT: JICST-E
Flow and heat transfer in a channel with abrupt expansion., 1989

...ABSTRACT: expansion dump combustor of solid fuel ramjet and solid ducted rocket. Wall pressure coefficients and heat transfer coefficients have been measured and the mean velocity and turbulent intensity distributions have been determined. The flow visualizations are carried out by means of surface oil flow method and in a smoke wind tunnel. The relationships between these experimental data are discussed...

7/6,KWIC/229 (Item 12 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

00712228 JICST ACCESSION NUMBER: 88A0602635 FILE SEGMENT: JICST-E
A study on aerodynamic heating in the interaction regions of shock waves and turbulent boundary layers induced by sharp fins., 1988

...ABSTRACT: under the cold wall conditions. Attack angles of fins are 4, 10 and 16 degrees. Heat transfer distributions are measured by multi-layered thin film heat transfer gauges developed by present authors. The results of oil -flow tests and wall pressure measurements are compared with the heat transfer distributions in the flowfields. Heat transfer distributions at 4 and 10 degrees have a ...

7/6,KWIC/230 (Item 13 from file: 94)
DIALOG(R)File 94:(c)2001 Japan Science and Tech Corp(JST). All rts. reserv.

00479293 JICST ACCESSION NUMBER: 87A0461767 FILE SEGMENT: JICST-E
A study on solidified oil and heat flux at tank bottom of a tanker carrying high pour point crude oil. Part 2. Heat transfer through tank bottom., 1987

...ABSTRACT: of bottom structure and the physical properties of loading oil. In order to investigate the heat transfer through tank bottom, the measurement of heat flux is carried out using the tank in the shape of bottom structure on the...

...oil are heating up with three heaters. The predicting formulae on variable thickness of solidified oil and heat flow at bottom as time proceeds are derived from the theory and the experimental values. These...

7/6,KWIC/231 (Item 1 from file: 96)
DIALOG(R)File 96:(c) 2001 Elsevier Science Ltd. All rts. reserv.

00150558 FLUIDEX NO: 0157269 SUBFILE: X
Heat transfer in turbine sleeve-type bearings.
Teploenergetika, vol.27, no.10, 1980, p.52-54., 1980

...turbine bearings, described in Teploenegetika, 1977 (1) 48-52. In this first series of tests heat transfer was determined by direct measurement of heat flux from the journal to the oil film with the aid of electrical calorimeters. The shaft speed, initial temperature and pressure of the oil, load on the bearing and oil flow rate were varied within fairly wide limits but the geometry, the radial clearance in particular...

...in which the radial clearance was varied and this has enabled the hydrodynamic conditions of flow in the oil to be determined and the equations describing heat transfer in the bearing to be refined...

7/6,KWIC/232 (Item 2 from file: 96)
DIALOG(R)File 96:(c) 2001 Elsevier Science Ltd. All rts. reserv.

00140048 FLUIDEX NO: 0146757 SUBFILE: T
Optimizing the operation of spindle bearings relative to their heat radiation.
Sov. Engng. Res., vol.3, no.6, Jun. 1983, p.76-77., 1983

...and control of the operating conditions in spindle bearings depending on the amount of radiated heat , when using apparatus to measure the

temperature of the indle bearings, it is shown that by optimzing their operating conditions the rate of flow of the oil and the heating of the bearings can be reduced whilst the accuracy of the machine...

7/6,KWIC/233 (Item 3 from file: 96)
DIALOG(R)File 96:(c) 2001 Elsevier Science Ltd. All rts. reserv.

00009329 FLUIDEX NO: 0015195 SUBFILE: PA
EXPERIMENTAL INVESTIGATION OF SOME THERMODYNAMIC ASPECTS OF REFRIGERATING COMPRESSORS.
PROC. 1972 PURDUE COMPRESSOR TECHNOL. CONF. (PURDUE UNIV. IN CO-OPERATION WITH ASHRAE AND CENTRAL INDIANA SECTION OF ASME), PP. 291 AND 510-20. (JULY 25-27, 1972)., 1972

...ASPECTS OF THE THERMODYNAMIC PHENOMENA OF A RECIPROCATING REFRIGERATING COMPRESSOR: 1< THREE METHODS FOR THE MEASUREMENT OF MANIFOLD HEAT TRANSFER COEFFICIENT WERE DEVELOPED AND THE EXPERIMENTAL UNCERTAINTIES AND THE DIFFERENCES IN THE RESULTS ARE...

...MEASURED.3< VALVE LEAKAGES WERE MEASURED UNDER VAROUS CONDITIONS.AND 4< THE MASS FRACTION OF OIL IN THE REFRIGERANT FLOW WAS MEASURED DIRECTLY AND INDIRECTLY.THESE RESULTS ARE APPLICABLE TO MATHEMATICAL PERFORMANCE MODELS OF REFRIGERATING...
...DESCRIPTORS: MANIFOLD HEAT TRANSFER COEFFICIENT; RINGPLATE VALVE PASSAGE HEAT TRANSFER COEFFICIENT; VALVE LEAKAGE; MASS FRACTION OF OIL IN REFRIGERANT FLOW ; MATHEMATICAL MODELS OF PERFORMANCE

7/6,KWIC/234 (Item 1 from file: 99)
DIALOG(R)File 99:(c) 2001 The HW Wilson Co. All rts. reserv.

1784043 H.W. WILSON RECORD NUMBER: BAST98033902
What's new in gas distribution/transmission
19980400

...ABSTRACT: gas transmission and distribution: a complete facility asset management system from Intergraph Software Solutions; ultrasonic flowmeters from Controlotron; oil -flooded rotary screw compressor packages from Cooper Energy Services; Perfection Extended Life Technology gas risers...

...detector from Crowcon Detection Instruments; a 4-gas monitor from Metrosonics Inc.; a flame ionization detector from Heath Consultants Inc.; controlled rapid burn pre-combustion chambers and modified fuel valves from Diesel Supply...

7/6,KWIC/235 (Item 1 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

04614776 EDB-00-085183
Title: Ceramic turbocharger
Original Title: Ceramic turbocharger
Publication Date: 20 May 2000

...Abstract: impellers subjected to high tensile stress and placed in as complex shape as the turbocharger. Measurements revealed that junctions must have heat resistance to temperature at least 500 degree C or higher. Discussions were given for bonding...

...the result of an experiment that, even if a ceramic rotor was broken,

the lubrication oil will not flow out into the gas exhaust pipe to generate fire or white smoke. With regard to...

7/6,KWIC/236 (Item 2 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

04111439 CH-97-0E0017; EDB-97-020143
Title: Evaporation of new refrigerants on tube with improved surfaces. Final report. Appendices: A, B, C, D, E and F
Original Title: Evaporation de nouveaux refrigerants sur des tubes a surface amelioree. Rapport final. Annexes: A, B, C, D, E et F
Publication Date: Jul 1995

...Abstract: were programmed and compared to flow regimes observed on the test rig. Local flow boiling heat transfer coefficients were measured for HFC134a and HCFC123 evaporating inside a microfin tube. In addition, microheat transfer augmentation relative...

...of oil in the evaporator has an effect on heat transfer coefficient. Local flow boiling heat transfer coefficients were measured for refrigerant HFC134a-oil ester (Mobil EAL Arctic 68). A new thermodynamic approach for modeling...

...and lubricating oils is developed. A very high accuracy, straight vibrating tube type of density flowmeter is used to measure oil concentrations of flowing HFC134a-oil mixtures. (author) figs., tabs., refs.

7/6,KWIC/237 (Item 3 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

04004525 CH-96-0E0110; EDB-96-088285
Title: Evaporation of new refrigerants on tubes with improved surfaces
Original Title: Evaporation de nouveaux refrigerants sur des tubes a surface amelioree
Publication Date: Jul 1995

...Abstract: were programmed and compared to flow regimes observed on the test rig. Local flow boiling heat transfer coefficients were measured for HFC134a and HCFC123 evaporating inside a microfin tube. In addition, microfin heat transfer augmentation...

...of oil in the evaporator has an effect on heat transfer coefficient. Local flow boiling heat transfer coefficients were measured for refrigerant HFC134a-oil ester (Mobil EAL Arctic 68). A new thermodynamic approach for modeling...

...and lubricating oils is developed. A very high accuracy, straight vibrating tube type of density flowmeter is used to measure oil concentrations of flowing HFC134a-oil mixtures. (author) 28 figs., 25 refs.

7/6,KWIC/238 (Item 4 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

03983058 NEDO-95-914703; EDB-96-066818
Title: Flow velocity measurement. Hot film anemometer and laser doppler velocimeter measurement techniques in automotive hydraulics components
Original Title: Ryusoku sokutei. Netsumaku ryusokukei, reza ryusokukei ni

yoru jidoshay[redacted]hatsu kikinai ryusoku sokutei gijutsu
Publication Date: 15 Sep 1995

...Abstract: in the measurement of flow velocity, and the representative ones used in the flow velocity measurement of liquid are pressure, heat , light and so on. Among the methods using heat and light, Hot Film Anemometer (HFA...

...about the principles of HFA and LDV, the attention points in their applications to the flow velocity measurements of liquid especially oil and the cases of the applications to the flow velocity in hydraulic apparatus for automobiles...
...Major Descriptors: HEAT -- SENSITIVITY ANALYSIS

7/6,KWIC/239 (Item 5 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

03976791 EDB-96-060551
Title: Heat transfer characteristics of alternate refrigerants: Volume 2, Condenser inside tube. Final report
Publication Date: Jan 1996

...Abstract: data for R-22 and R-502. Each refrigerant was tested at 0% and 1% oil by weight, four different mass flow rates (75, 150, 250, and 400 lb[sub m]/hr), and three different heat fluxes...

...microgrooved tube. The data for R-22 compared well with published data and correlations. The measured heat transfer coefficients for most of the alternatives were very close to the heat transfer coefficient...

...that some of the zeotropic refrigerants performed poorly at low heat fluxes and low mass flow rates, as expected. 1% oil in the refrigerant flow had very little impact on heat transfer coefficients. Also, it was found that at the...

7/6,KWIC/240 (Item 6 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

03719455 EDB-94-135421
Title: Guidelines for welding appurtenances to in-service pipelines
Title: 72nd AWS annual meeting
Conference title: 72. annual American Welding Society (AWS) convention
Publication Date: 1991

...Abstract: flow rates conducive to sound welds. Other research has resulted in the development of a heat -sink measurement technique which permits on-the-spot measurement of the effects that flowing products in the...

...HAZ cracking. The models were validated by 180 experimental appurtenance welds performed on pipes containing flowing and nonflowing liquid propane, fuel oil , and crude oil. The experiments also produced empirical correlations between the heat -sink measurement technique and the weld cooling times. The models and the heat-sink-technique can be...

7/6,KWIC/241 (Item 7 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

03551888 EDB-93-[illegible]766
Title: Blast furnace process measurement at Dofasco
Conference title: 52. ironmaking conference
Publication Date: 1993

...Abstract: In the early eighties, off-line analysis of Dofasco's operation using a two stage heat and mass balance determined that measurement capability was not adequate for the challenge of a low fuel rate operation. To establish a project plan for obtaining a more efficient operation, a sensitivity analysis of the heat and mass balance was conducted. The results of this analysis enabled Dofasco to target several...

...sensors that had a direct impact on process control were upgraded first. These sensors were: Oil Flow , Wind Flow , Charged Weights, Hot Blast Temperature, and Coke Moisture. Following this work, the major process monitoring...

7/6,KWIC/242 (Item 8 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

03338366 NEDO-92-950144; EDB-92-101123
Title: Basic research on production technology (collaborative R and D with private companies)
Original Title: Seisan koritsu kojo no kenkyu
Title: Record of TRC's (Technology Research Center of Japan National Oil Corporation) activities in the fiscal year 1990
Original Title: Sekiyu Kaihatsu Gijutsu Center nenpo
Publication Date: 15 Oct 1991

...Abstract: studies on artificial oil mining methods, two-phase fluid behaviors and flow characteristics of high flowing point crude oil to improve the production efficiency for crude oil and natural gases. Items of technical information...

...oil mining methods and two-phase fluid behaviors. As regards the flow characteristics of high flowing point crude oil , both the South Sea crude oil and the Pohai crude oil B had their flowing point decreased as a result of heat treatment. The South Sea crude oil B had ...

...degree}C , which increased with the temperatures. Solidifying and melting experiments were carried out to measure the heat conducting amount from the temperature changes in the piping when the South Sea crude oil...

7/6,KWIC/243 (Item 9 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

02788862 NOV-89-084011; EDB-90-006075
Title: Recovery of oil from oil-bearing formation by continually flowing pressurized heated gas through channel alongside matrix
Publication Date: 15 Aug 1989

Title: Recovery of oil from oil-bearing formation by continually flowing pressurized heated gas through channel alongside matrix
...Abstract: comprises the steps of continually flowing a pressurized heated non-aqueous gas along and in heat exchange relationship with a sensible boundary of the reservoir so as to impart sufficient heat and dissolve sufficient gas into...

...boundary of the reservoir to mobilize the oil-in-place by decreasing its viscosity; effecting flow the the mobilized oil into one ore more collection reservoirs; producing the oil from one or more collection reservoirs...

7/6,KWIC/244 (Item 10 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

02285541 NOV-89-040423; EDB-89-031277
Title: Experimental investigation of a direct contact heat exchanger with structured packing
Title: Solar engineering - 1988
Conference title: 10. annual American Society of Mechanical Engineers solar energy conference
Publication Date: 1988

Abstract: Preliminary results from experiments in which the volumetric heat transfer coefficient is measured for a direct contact heat exchanger with and without structured packing are described. The working fluids are water, the continuous...

...water are varied from 0.001 to 0.003 cubic meters per second, while the oil flow rates are varied from 0.0009 to 0.0015 cubic meters per second. The holdup...

7/6,KWIC/245 (Item 11 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

02233491 EDB-88-176234
Title: Heat flow anomalies in oil- and gas-bearing structures
Publication Date: Feb 1988

Title: Heat flow anomalies in oil- and gas-bearing structures
Abstract: The main features of the distribution of heat flow values in oil , gas and gas-condensate fields on the continents have been discussed by Makarenko and Sergiyenko...

...and gas-bearing structures in those regions. The earlier analysis of the distribution of heat flow values in oil and gas structures was based on 403 measurements. The author now has nearly doubled the...

...of oil and gas. This conclusion stems from the fact that the overwhelming majority of heat flow measurements were made on various kinds of positive structural forms, and distortions of the thermal field...

...and nonproductive structures. As a result, for the first time a continuous time series of heat flow measurements over oil and gas structures in various tectonic regions, with ages of consolidation ranging from the Precambrian...

7/6,KWIC/246 (Item 12 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

02084620 NEDO-86-910076; EDB-88-027342
Title: Study on various chemical heat pump reaction systems using liquid ammoniate in low temperature side
Title: Proceedings of the 12th Symposium of Japan Solar Energy Society

Publication Date: 1986

...Abstract: heat storage system applicable to a temperature range of 80-150/sup 0/C. Reaction heat is measured with the NiCl/sub 2/-NH/sub 3/-NH/sub 4/NO/sub 3/ system, from temperaturize of water for analyzing relationships between oil temperature, NH/sub 3/ flowrate system pressure, temperature and heat storing time in the low temperature side. It is proved...

7/6,KWIC/247 (Item 13 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01716390 AIX-17-009467; EDB-86-040058
Title: Radiation decontamination of dry chamomile flowers and chamomile extract
Title: Food irradiation processing. Proceedings of an international symposium held in Washington, DC, 4-8 March 1985
Series/Collection Title: Proceedings series
Conference title: International symposium on food irradiation processing
Publication Date: 1985

...Abstract: For radiation decontamination of concentrated chamomile extracts higher doses are required than for dry chamomile flowers . The components of ethereal oil and hydrophilic components obtained from irradiated dry flowers did not change up to a 10...

...and convenient method for decontamination of dry plants and the only choice for decontamination of heat -sensitive extracts and concentrates. (author). 13 refs, 1 fig, 6 tabs.

7/6,KWIC/248 (Item 14 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01707356 DE-86-001345; EDB-86-031023
Title: A device for measuring the flow rate of a liquid or gas in a well
Publication Date: 1984

...Abstract: a well which contains a body in which there are two cylinders with heating and heat sensing elements. In order to increase the sensitivity and to expand the measurement range the cylinders...
...Major Descriptors: OIL WELLS -- FLOW RATE

7/6,KWIC/249 (Item 15 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01595431 ERA-10-033519; EDB-85-102211
Title: Thermal storage subsystem evaluation
Title: Department of Energy solar central receiver annual meeting: proceedings
Conference title: Solar central receiver annual meeting
Publication Date: Feb 1985

...Abstract: transferring heat into the bed. Steam is generated in the extraction heat exchangers using hot oil obtained by reversing the flow through the rack and sand bed. The Thermal Storage Subsystem is routinely operated for both...
...Descriptors: SENSIBLE HEAT STORAGE

7/6,KWIC/250 em 16 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01372978 EDB-84-070773
Title: Device for covering a string of pump-compressor pipes
Publication Date: 1982

...Abstract: refers to oil field equipment, and more specifically to devices for automatic coverage of the flow of gusher oil and gas wells during the development of a fire near the well. A device is...

...compressor pipes, shoe, seat and assembly for fixing the piston in the upper position with heat -sensitive substance. It is distinguished by the fact that in order to improve reliability of its...

...piston is equipped with hydraulic cylinders whose rods are connected to the piston, and the heat sensitive substance is placed in the vessels whose cavities are connected to the above-piston cavities...

7/6,KWIC/251 (Item 17 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01338758 EDB-84-036434
Title: Tracer technique offers precise metering without downtime
Publication Date: 22 Jun 1983

...Abstract: be extremely costly. One source of error is through flow rate data obtained from online flow meters. Measurements of fuel oil and gas flow rates by online meters have been found to contain errors as high as 20%. A...

...potential cost-benefits of the method for effluent monitoring, process optimization, flow distribution studies, leak detection in heat exchangers, monitoring flow rates in slurry pipelines and other diverse applications.

7/6,KWIC/252 (Item 18 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01322503 EDB-84-020177
Title: The rheological properties of Prudhoe Bay oil and the effects of a prolonged flow interruption on its flow behavior
Publication Date: Jun 1983

...Abstract: oil. The temperature decline would cause a significant alteration of the flow behavior. A fundamental heat -transfer study and laboratory measurements were combined to forecast the rheological response and subsequent start-up requirements of Prudhoe Bay...
...Major Descriptors: ALASKA OIL PIPELINE -- FLUID FLOW ; *

7/6,KWIC/253 (Item 19 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

01259063 EDB-83-159065
Title: Some aspects of heat flow in France
Title: Geothermics and geothermal energy
Conference title: 7. European Geophysical Society meeting - geothermics and geothermal energy
Publication Date: 1982

...Abstract: brings out a clear dicrepancy between some of the data: in the Paris basin, heat flow estimates resulting from oil exploration boreholes without conductivity measurements are systematically higher than other types of measurements . Keeping only the more reliable heat flow measurements , we present a tentative heat flow map which accounts for the main trend of the remaining data. The most significant ...

7/6,KWIC/254 (Item 20 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00929606 AIX-13-680659; EDB-82-104457
Title: Temperature stabilization system for measuring apparatus (Patent)
Publication Date: 9 Sep 1981

...Abstract: the heat conductor and a fin heat dissipation device is joined to the cooler. A thermistor senses the temperature of the heat conductor. Control means respond to the sensed temperature to operate the cooler to remove heat...

...photomultiplier perform better at the stabilized temperature, which may be less than that of the flowing material such as warm oil .

7/6,KWIC/255 (Item 21 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00872084 ERA-07-021575; EDB-82-046925
Title: Conductive thermal modeling of Wyoming geothermal systems
Title: Geothermal direct heat program: Glenwood Springs technical conference proceedings. Volume I. Papers presented, State Coupled Geothermal Resource Assessment Program
Conference title: Geothermal energy exploration and resource assessment technical conference
Publication Date: May 1981

...Abstract: placed on thermal modeling techniques appropriate to Wyoming's geologic setting. Thermal parameters discussed include oil -well bottom hole temperatures, heat flow , thermal conductivity, and measured temperature-depth profiles. Examples of the use of these techniques are from the regional study...

7/6,KWIC/256 (Item 22 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00758894 EDB-81-067154
Title: Heat and mass transfer in a combustion oil shale retort
Publication Date: 1980

...Abstract: temperature predictions are compared to experimental temperature data obtained from the transient heating of an oil shale cylinder subjected to a flow of a hot inert gas. Excellent agreement results for the heating of shale to 650...

...0/C. Above 650/sup 0/C, the model temperatures are in slight disagreement with measured temperature. The numerical heat and mass transfer model is also compared to data obtained from the heating of an ...

7/6,KWIC/257 (Item 23 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00742027 EDB-81-050284
Title: Heat flow and heat production studies in North Dakota
Publication Date: 1978

...Abstract: determinations in North Dakota range from 0.6 to 1.9 HFU. The majority of heat flow measurements were completed for southwestern North Dakota. Heat flow measurements were made in both oil and water wells. Heat production data from basement rocks when used in conjunction with nearby...

7/6,KWIC/258 (Item 24 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00722828 EDB-81-031082
Title: Shale oil: what's its future
Publication Date: Sep 1965

...Abstract: largest global potential source of energy in the form of carbon-containing matter. However, the oil will not flow , but rather the shale must be mined and heated to a relatively high temperature to...

...associated with considerable quantities of mineral matter which not only absorbs a large amount of sensible heat , but also presents a real disposal problem. As with any national asset, the effect of...

...a host of paper charges probably will, in the long run, decide whether American shale oil will flow in the near future. The answer will be provided by those who make economic policy...

7/6,KWIC/259 (Item 25 from file: 103)
DIALOG(R)File 103:(c) 2001 Contains copyrighted material. All rts. reserv.

00163020 ERA-02-006615; EDB-77-000285
Title: Hearing on conversion of oil shale to synthetic fuels, October 7--9, 1975
Publication Date: Sep 1975

...Abstract: cooled in the bottom zone. Hydrogen feed to the bottom zone recovers essentially all the sensible heat in the spent shale, then uses this heat to preheat the feed shale in the...

...simulated in-situ retort on the applicability of the method to the underground processing of oil shale were encouraging. Flow sheets for above-ground and in-situ versions of the process are included.

7/6,KWIC/260 (Item 1 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

02306498 N97-22057
Industrial Heat Engineering
PUBLICATION DATE: 199601

... the following topics: heat and mass transfer processes and apparatus; heat and mass exchange technology; heat energy devices; measurement ,

control, and automation of heat processes; experimental thermophysics; and thermal gas dynamics...

... Additional articles discuss an atomizer for a flame atomic-absorption test of lead admixtures in oil products; modelling a turbulent flow for the investigation of laminarized profiles; hydrodynamics of the contact put-on heat exchanging devices...
...DESCRIPTORS: HEAT MEASUREMENT ; *

7/6,KWIC/261 (Item 2 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

02219274 A96-12479
Aerodynamic heating in three-dimensional bow shock wave/turbulent boundary layer interaction region
PUBLICATION DATE: 199500

... plate to the blunt body, the effect of the height is investigated by use of oil flow technique, surface pressure measurements , and surface heat flux measurements .

7/6,KWIC/262 (Item 3 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

02085459 A93-45507
Aerodynamic heating phenomenon in three dimensional shock wave/turbulent boundary layer interaction induced by sweptback fins in hypersonic flows
PUBLICATION DATE: 199200

...A new method of measuring heat flux developed by the present authors is used, and is based on a new type...

...The flow fields are visualized by oil flow and detailed surface pressure and surface heat flux distributions in the interaction regions for various...

7/6,KWIC/263 (Item 4 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

02082590 A93-42638
Experiments on the heat transfer and on the aerodynamic coefficients of a delta wing in rarefied hypersonic flows
PUBLICATION DATE: 199100

...9 x 10 exp 4 at angles of attack alpha = 0-30 deg for the heat flux measurements and alpha = 0-40 deg for the force measurements...

... Oil flow pattern and gas glow discharge visualization are used to discuss an eventual flow separation on

7/6,KWIC/264 (Item 5 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

02082554 A93-42602
Experimental study of the longitudinal hypersonic corner flow field - HERMES-R&D research program, problem no. 5
PUBLICATION DATE: 199100

...For measuring heat flux values an infrared thermovision camera system in connection with modern image processing allows thermal...

...In addition to the thermographic results the flow interpretation was supported by an oil flow visualization study...

7/6,KWIC/265 (Item 6 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

01817837 A89-47629
Measured and predicted aerodynamic heating on a cylinder in wake of AFE configuration at incidence (Aeroassist Flight Experiment)
PUBLICATION DATE: 198900

Thin-film resistance gages were used to measure cylinder surface heat -transfer rates in the near wake of the Aeroassist Flight Experiment vehicle configuration, while surface-streamline directions were ascertained by the oil - flow techniques under the same configuration and test conditions...

7/6,KWIC/266 (Item 7 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

01497019 A85-11626
Unsteady turbulent boundary layers and friction; Proceedings of the Energy Sources Technology Conference, New Orleans, LA, February 12-15, 1984
PUBLICATION DATE: 198300

The present conference discusses experiments in periodic turbulent pipe flow whose fluids include air, water, oil , and electrolyte solutions, as well as pressure and heat transfer measurements around a cylinder in pulsating crossflow and the calculation of oscillatory turbulent flows in open...

7/6,KWIC/267 (Item 8 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

00987026 A79-19595
Fin-cone interference flow field
PUBLICATION DATE: 197901

... flow visualization experiments to illustrate the flow structure, and (c) gathering a data base of heat -transfer and surface-pressure measurements to predict peak interference heating and peak pressure levels...

... These quantitative measurements were used in conjunction with both schlieren and oil - flow photographs in an effort to characterize the fin-cone interference flow field.

7/6,KWIC/268 (Item 9 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

00852312 N76-15405
Heat -flux gage measurements on a flat plate at a Mach number of 4.6 in the VSD high speed wind tunnel, a feasibility test (LA28) (wind tunnel tests of measuring instruments for boundary layer flow)
PUBLICATION DATE: 197512

Heat -flux gage measurements on a flat plate at a Mach number of 4.6 in the VSD high...
.. Flow visualization techniques (using oil) were employed
...DESCRIPTORS: HEAT MEASUREMENT ; *

7/6,KWIC/269 (Item 10 from file: 108)
DIALOG(R)File 108:(c) 2001 AIAA. All rts. reserv.

00839309 A77-43914
Investigation of heat transfer in separated flows at low Reynolds numbers
Issledovanie teploobmena v otryvnykh techeniiakh pri nizkikh znacheniiakh chisel Reinol'dsa
PUBLICATION DATE: 197600

... in the form of an asymptotic calorimeter provided with a pressure pickup (using which the heat flux and pressure could be measured simultaneously at any point); and flow visualization by means of an oil film containing aluminum powder...

7/6,KWIC/270 (Item 1 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

14611475 PASCAL No.: 00-0280731
Mist/steam cooling in a heated horizontal tube-Part 2: Results and modeling
2000

English Descriptors: Performance evaluation; Test; Water vapor; Measurement method; Droplet flow ; Heat transfer; Turbomachine; Tube; Oil mist; Droplet; Modeling; Stainless steel; Temperature distribution; Mass flow; Evaporation; Heat flow; Experimental study

7/6,KWIC/271 (Item 2 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

14218341 PASCAL No.: 99-0419298
Heat flow and hydrocarbon reservoirs in Croatia
1999

... temperature measurements in deep exploration and production hydrocarbon wells corrected on static conditions, ground temperature measurements performed at meteorological stations, and heat conductivities of rocks calculated from interval seismic velocities. Hydrocarbon reservoirs can be associated with the...

English Descriptors: Oil field; Geothermal prospecting; Heat flow ; Thermal conduction; Convection; Temperature gradient; Exploration; Croatia

7/6,KWIC/272 (Item 3 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

13835171 PASCAL No.: 99-0011101

Heat flow in Oklahoma and the south central United States
1998

... C km SUP - SUP 1 . We made 1498 thermal-conductivity measurements on drill cuttings from oil and gas wells. Heat flow in Oklahoma varies between 22 and 86 mW m SUP - SUP 2 ; the average is...

English Descriptors: Oklahoma; Heat flux; Geothermal gradient; Measurement. in situ; Thermal conductivity

7/6,KWIC/273 (Item 4 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

13097144 PASCAL No.: 97-0394081
Experimental investigation of the effect of shaft heating and cooling on single bore journal bearing
1997

... THD performance of single bore journal bearings. The journal can be heated or cooled by flowing oil of controlled temperature inside the journal. The temperature distribution on the bearing surface and the...

...English Descriptors: Experimental study; Testing equipment; Thermal expansion; Cooling; Heating; Shaft; Test bench; Eccentricity; Temperature distribution; Temperature measurement ; Heat transfer; Theoretical study; Surface temperature

7/6,KWIC/274 (Item 5 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

12944199 PASCAL No.: 97-0216922
Can biomarker ratio data be used quantitatively to constrain thermal histories ? A case study from East Kalimantan, Indonesia
Risk and uncertainty in petroleum exploration
1996

... either from measurements in the laboratory and extrapolation to the geological setting, or from downhole measurements where the heat flow history is assumed to be known. in the first case serious errors can arise ...

English Descriptors: Petroleum prospecting; Geochemical prospecting; Biological marker; Thermal history; Oil maturation; Petroleum origin; Heat flow ; Modeling; Data analysis; Kalimantan

7/6,KWIC/275 (Item 6 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

12657578 PASCAL No.: 96-0352898
An analytical and computational investigation of high-rate rheometry
1996

English Descriptors: Rheometers; Numerical methods; Strain rate; High speed

; Lubricating oil ; Numerical simulation; Shear flow ; Heat conduction ; Lubricating film; Transient response; Temperature distribution; Velocity distribution; Measurement method; Heat transfer

7/6,KWIC/276 (Item 7 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

12565270 PASCAL No.: 96-0248086
Heat flux monitoring during cryogenic pipe freezing : A case study
1996

Recent experience freezing a large vertical water-filled pipe demonstrated the value of measuring pipe surface heat fluxes during the freezing operation, a technique developed at the University of Southampton. The heat...

English Descriptors: Cryogenics; Freezing; Thermal insulation; Water pipe; Measurement ; Heat flow ; Oil ind ustry; Refinery

7/6,KWIC/277 (Item 8 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

10663469 PASCAL No.: 93-0172755
Heat transfer during two-phase flow in wellbores: Part II Wellbore
1991

English Descriptors: Oil field; Two phase flow ; Temperature; Calculating method; Heat transfer; Sensitivity analysis; Depth; Wellhead; Reservoir engineering

7/6,KWIC/278 (Item 9 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

05955146 PASCAL No.: 85-0140467
Korrelative Volumenstrom-Messung von Mineraloelen mit pseudozufaelligen Waerme-Impulsen
(Correlative volume flow measurement of mineral oil)
1983

(Correlative volume flow measurement of mineral oil)
...pseudozufaelligen Waermequelle leicht lokal aufgeheizt und die mit der Stroemung transportierten Waermepakete mittels 2 Miniatur-Thermistoren detektiert. Aus der Lage des Maximums der Kreuzkorrelationsfunktion der Thermistorsignale kann auf die Transportgeschwindigkeit geschlossen werden. Der verwendete Korrelator ist ein Relais-Korrelator. Zur Impfung...

7/6,KWIC/279 (Item 10 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

02439100 PASCAL No.: 79-0411364
DRAG AND HEAT TRANSFER ON A ROUGH PLATE AT VARIOUS PR NUMBERS
1978 PUBL. 1979

English Descriptors: AIR; WATER; TURBULENT FLOW ; TRANSFORMER OIL ; MEASUREMENT ; PLATES; ROUGH SURFACE; HEAT TRANSFER

7/6,KWIC/280 (Item 11 from file: 144)

DIALOG(R)File 144 2001 INIST/CNRS. All rts. reserv.

00810299 PASCAL No.: 76-0022460
EN RUSSE.
(RESISTANCE ET TRANSFERT DE CHALEUR D'UNE PLAQUE RUGUEUSE POUR DIFFERENTES VALEURS DU NOMBRE DE PRANDTL)
1975

English Descriptors: AIR; HEAT TRANSFER COEFFICIENT; WATER; FLOW ; OIL ; MEASUREMENT ; PRANDTL NUMBER; FLAT PLATE; ROUGH SURFACE; HEAT TRANSFER

7/6,KWIC/281 (Item 12 from file: 144)
DIALOG(R)File 144:(c) 2001 INIST/CNRS. All rts. reserv.

00662790 PASCAL No.: 74-0012636
COMPARISON OF THE CALCULATED AND MEASURED HEAT TRANSFER DISTRIBUTION IN AN OIL-FIRED WATER-TUBE BOILER
(COMPARAISON DES DISTRIBUTIONS CALCULEES ET MESUREES DU FLUX THERMIQUE DANS UNE CHAUDIERE TUBULAIRE A FUEL OIL)
1974

COMPARISON OF THE CALCULATED AND MEASURED HEAT TRANSFER DISTRIBUTION IN AN OIL-FIRED WATER-TUBE BOILER

English Descriptors: BOILER; COMPARATIVE STUDY; HEAT FLOW ; FUEL OIL ; UNITED KINGDOM; HEAT TRANSFER

7/6,KWIC/282 (Item 1 from file: 240)
DIALOG(R)File 240:(c) 2001 IPST. All rts. reserv.

00128162 PAPERCHEM NO: AB4900531
BURNING NO. 6 OIL WITH ADDITIVES CAN COST LESS THAN NO. 2 OIL OR GAS
PUBLICATION YEAR: 1978

... chemical treatment program using fuel conditioners. Dispersants and emulsifiers prevent tank corrosion and keep the oil flowing smoothly to the preburner equipment. A combustion catalyst may be used to reduce opacity or...
...DESCRIPTORS: CALORIMETRY; CARBON; CATALYSTS; CHEMICAL TREATMENT; CLEANING; COMBUSTION; CORROSION PREVENTION; COSTS; DISPERSANTS; EMISSION; EMULSIFIERS; ENGLISH; EQUIPMENT; HEAT TRANSFER; IMPURITIES; KRAFT MILLS; MAINTENANCE; MEASUREMENT ; MILLS; MONITORING; NONMETALS; OIL; OPACITY; POLLUTION; POLLUTION CONTROL; PULP MILLS; SURFACES; TANKS; THERMAL MEASUREMENT; UNITED...

7/6,KWIC/283 (Item 1 from file: 315)
DIALOG(R)File 315:(c) 2001 DECHEMA. All rts. reserv.

381994
Numerical simulation of flow and heat transfer in natural gas well bore.
Orig. Title: Title in Chinese.
PUBLICATION DATE: Aug 1995 (950800)

...ABSTRACT: on basic principles of gas dynamics, heat transfer, and thermodynamics. Model predictions agreed well with measured values. Two heat insulation methods for preventing the formation of gas hydrates are discussed. To increase the exit...
DECHEMA CLASSIFICATION CODE AND HEADING:
(Oil , natural gas)

7/6,KWIC/284 (Item 2 from file: 315)
DIALOG(R)File 315:(c) 2001 DECHEMA. All rts. reserv.

131133
Correlative volume flow measurement of mineral oils with pseudo-random heat pulses
Orig. Title: Korrelative Volumenstrom-Messung von Mineraloelen mit pseudozufaelligen Waerme-Impulsen
PUBLICATION DATE: 1983 (830000)

Title: Correlative volume flow measurement of mineral oils with pseudo-random heat pulses
...ABSTRACT: der gesamte Volumenstrom ermittelt. Versuchsaufbau: Messrohr mit zwei in der Mitte des Stroemungsquerschnitts installierten Miniatur-Thermistoren zur Erzeugung und Detektion von Waerme-Impulsen und einer Ansteuer-Elektronik. Erzeugung der Waerme-Impulse durch kurzzeitiges Aufheizen des Thermistors . Indirekte Messung der Laufzeit durch Kreuzkorrelation der Ein- und Ausgangssignale. Das Auftreten eines Stoersignals durch...

7/6,KWIC/285 (Item 3 from file: 315)
DIALOG(R)File 315:(c) 2001 DECHEMA. All rts. reserv.

111394
Heat transfer non-uniformities downstream of three-dimensional boundary layer trips
PUBLICATION DATE: 1982 (820000)

ABSTRACT: Ine present paper will present and discuss heat transfer non-uniformities measured downstream of an array of three-dimensional trip elements on a spherically blunted cone at...

...numbers; however, the variation reduced to 20 percent at higher Reynolds corresponding to fully tripped flow . Oil flow photographs obtained during the tests are included, which show patterns indicative of longitudinal vortices whose...

7/6,KWIC/286 (Item 4 from file: 315)
DIALOG(R)File 315:(c) 2001 DECHEMA. All rts. reserv.

075334
Buoyancy driven flows originating from heated cylinders submerged in a finite water layer
PUBLICATION DATE: Mar 1980 (800300)

ABSTRACT: Thermal performance is strongly influenced by the flow conditions in heated oil storage tanks, waste heat dissipation systems and sensible energy storage systems. Conditions have been observed in shallow water layers using flow visualisation techniques and temperature measurement . Submerged cylinders provided heat and cooling occurred at the air surface. Laminar boundary layers and plumes were noted and...

7/6,KWIC/287 (Item 5 from file: 315)
DIALOG(R)File 315:(c) 2001 DECHEMA. All rts. reserv.

024753

Plant maintenance look at inspection, vibration, instru ments
PUBLICATION DATE: 17 June 1974 (740617)

...ABSTRACT: burning furnaces, how reliable and accurate are ultrasonic measuring devices used for crude andor heavy oils flowlevel measurement, what types of level-indicating devices are most successful in determining acid levels.
...DESCRIPTORS: plant operation; maintenance; calculation; process enhancing; vibration enhancing; level measurement; level control; flow control; flow measurement ; liquid flow; heat transfer; furnace; reactor; fluid; indirect-contact heat exchanger; air-cooled; extended surface

7/6,KWIC/288 (Item 1 from file: 211)
DIALOG(R)File 211:(c) 2001 The Gale Group. All rts. reserv.

13121246 Supplier Number: 75091431 (Use format 7 or 9 for FULL TEXT)
70s See Overall Growth and Increasing Regulation.(in the air conditioning, heating and refrigeration industries)
April 30, 2001
WORD COUNT: 3378 LINE COUNT: 00274

... called for a much better year.
At the 76 AHR Expo, the Fedders rotary-powered heat pump was dubbed a "sensation " by The News. The company said that its rotary compressor solved problems long associated with...changed, the hvacr industry adjusted to its vagaries and came up with various energy-conserving measures . Heat pumps overcame earlier problems and experienced a boom time.
Solar became the energy darling, garnering...been forever linked with this first recorded outbreak, with many more to come.
-- Greg Mazurkiewicz
Oil Embargo Halts the Flow
Although it was formed in 1960, the Organization of Petroleum Exporting Countries (OPEC), made up...

7/6,KWIC/289 (Item 1 from file: 241)
1057819 SUBFILE: EPRI TECHNICAL REPORT
Static Electrification in the External Oil Circulation System of Power Transformers
REPORT NUMBER: EPRI TR-102112 0070p.
CONTRACT/GRANT NO.: RP1499-16
PUBLICATION YEAR: 1995 03
?LOGOFF HOLD
26jun01 11:49:09 User079193 Session D6863.3
Sub account: 6/26 SEE LOG DLF BILLABLE
$3.18 0.589 DialUnits File9
$1.00 4 Type(s) in Format 95 (KWIC)
$1.00 4 Types
$4.18 Estimated cost File9
$9.22 1.708 DialUnits File15
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$11.97 Estimated cost File15
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        $0.00  22 Types
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  $2.18  Estimated cost File31
        $1.37    0.285 DialUnits File32
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          $0.04    0.033 DialUnits File278
    $0.04 Estimated cost File278
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    $0.31 Estimated cost File608
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          $0.32    0.080 DialUnits File241
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          $1.52    0.435 DialUnits File266
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          $0.83    0.237 DialUnits File109
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    $6.79 TELNET
  $299.96 Estimated cost this search
  $702.58 Estimated total session cost  80.467 DialUnits

### Status: Signed Off. (91 minutes)
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